TRAINMASTERS

H. A. SPRAGUE	Dunsmuir, Cal.
J. B. STARBUCK	Dunsmuir, Cal.
W. C. HUGHES	Klamath Falls, Ore.
H. C. CHASE	Klamath Falls, Ore.

ASSISTANT TRAINMASTER

C. E. CASSELL	Alturas, Cal.

ROAD FOREMEN OF ENGINES

A. L. SHOUPE	Klamath Falls, Ore.
J. E. PETERSON	Dunsmuir, Cal.

ASSISTANT TRAINMASTER—DIVISION EXAMINER

S. L. CLAYTON	Dunsmuir, Cal.

CHIEF TRAIN DISPATCHERS

W. J. MANLEY	Dunsmuir, Cal.
W. R. PETTY	Klamath Falls, Ore.

F. W. CANTRELL
Assistant Superintendent, Dunsmuir, Cal.

SOUTHERN PACIFIC COMPANY

SHASTA DIVISION TIMETABLE

53

EFFECTIVE SUNDAY, JUNE 2, 1946
AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION OF EMPLOYES ONLY

J. W. CORBETT,
General Manager.

R. E. HALLAWELL,
H. R. HUGHES,
Assistant General Managers.

G. C. BAKER,
General Superintendent of Transportation.

C. H. GRANT,
Superintendent of Transportation.

G. H. KILBORN,
Superintendent.

HOSPITAL DEPARTMENT SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. W. W. Washburn	Chief Surgeon
Dunsmuir	Dr. E. J. Cornish	District Physician and Surgeon
Dunsmuir	Dr. E. V. Anderson	District Physician and Surgeon
Dunsmuir	Dr. E. A. Opacity	Assoc. Dist. Physician and Surgeon
Mt. Shasta	Dr. J. B. McGuire	District Physician and Surgeon
Montague	Dr. Charles Pius (Residence—Yreka)	District Physician and Surgeon
Hilt	Dr. R. F. Schlappi	District Physician and Surgeon
Ashland	Dr. H. A. Woods	District Physician and Surgeon
Ashland	Dr. R. E. Poston	Asst. Dist. Physician and Surgeon
Ashland	Dr. E. A. Woods	Oculist and Aurist
Red Bluff	Dr. F. L. Doane	District Physician and Surgeon
Anderson	Dr. G. E. Flora	District Physician and Surgeon
Redding	Dr. H. R. McVickers	District Physician and Surgeon
Redding	Dr. J. L. Price	District Physician and Surgeon
Gerber	Dr. R. G. Frey	District Physician and Surgeon
Dorris	Dr. E. S. Peeke	District Physician and Surgeon
Klamath Falls	Dr. E. D. Johnson	Division Physician and Surgeon
Klamath Falls	Dr. C. V. Rugh	District Physician and Surgeon
Klamath Falls	Dr. E. D. Lamb	Assoc. Dist. Physician and Surgeon
Klamath Falls	Dr. R. W. Stearns	Oculist and Aurist
Tule Lake	Dr. J. Randolph Barr	District Physician and Surgeon
Chiloquin	Dr. M. Nerseth	District Physician and Surgeon
Alturas	Dr. J. Paul McKenney	District Physician and Surgeon
Alturas	Dr. Phillip W. McKenney	District Physician and Surgeon
Lakeview	Dr. C. E. Leithead	District Physician and Surgeon
Yreka	Dr. Charles Pius	District Physician and Surgeon
Yreka	Dr. R. W. Jones	Asst. Dist. Physician and Surgeon

Note.—Emergency Surgeons should only be summoned for temporary treatment when prompt attention is required and when patients cannot be sent to or await arrival of Division or District Surgeon.

HOSPITALS

GENERAL	SAN FRANCISCO
EMERGENCY	GERBER

REDDING SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS			FIRST CLASS					Mile Post Location	Timetable No. 53 June 2, 1946	Distance from Gerber
	622	620	618	18	14	12	16	20			
	Freight	Freight	Freight	Oregonian	Beaver	Cascade	West Coast	Klamath			
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		STATIONS	
Gerber yard 164 BKWOYP	PM 4.30	AM 8.30	AM 12.30	PM 11.20	PM 9.40	PM 9.25	PM 2.15	AM 3.30	213.8	TO-R GERBER	0.0
P									214.8	1.0 KISKA	1.0
									215.8	1.0 PROBERTA	2.0
102 P	4.40	8.40	12.40	11.27	9.47	9.32	2.23	3.38	218.9	3.1 RAWSON	5.1
Yd. Lmts. 54 P	4.50	8.50	12.50	s 11.37	9.54	9.39	s 2.35	s 3.52	223.4	4.5 TO RED BLUFF	9.6
98 P	4.53	8.53	12.53	11.39	9.56	9.41	**2.37**	3.54	224.5	1.1 GLADE	10.7
101 P	5.03	9.03	1.03	11.45	10.02	9.47	2.45	4.00	228.9	4.4 BLUNT	15.1
108 P	5.13	9.13	1.13	11.52	10.08	9.53	2.54	4.09	233.6	4.7 HOOKER	19.8
97 WP	5.25	9.25	**1.25**	PM 11.59	10.15	10.00	3.02	s 4.19	240.4	6.8 TO COTTONWOOD	26.6
106 P	5.31	9.31	1.31	AM 12.03	10.19	10.04	3.06	4.24	244.2	3.8 CULP	30.4
102 P	5.37	9.37	1.37	12.07	10.22	10.07	s 3.12	s 4.31	247.1	2.9 TO ANDERSON	33.3
106 P	5.47	9.47	1.47	12.13	10.28	10.13	3.19	4.38	253.5	6.4 GIRVAN	39.7
E 181 Yard Limits W 96 BKWIP	6.00	AM 10.00	2.00	s 12.25	PM f 10.35	PM f 10.20	s 3.40	s 5.10	258.2	4.7 TO REDDING	44.4
102 WOYP									263.0	4.8 SILVERTHORN	49.2
102 P							f 3.55	f 5.25	266.3	3.3 CENTRAL VALLEY	52.5
102 P									270.4	4.1 McCOLL	56.6
90 P									273.2	2.8 PITBRIDGE	59.4
102 P									277.6	4.4 O'BRIEN	63.8
102 P									281.2	3.6 MEAD	67.4
106 WYP									285.7	4.5 LAKEHEAD	71.9
110 WP							f 4.40	s 6.10	289.8 296.7	4.1 DELTA	76.0
111 P									300.2	3.5 LAMOINE	79.5
105 P									304.0	3.8 GIBSON	83.3
67 P									306.0	2.0 FISHER	85.3
110 WP									309.4	3.4 SIMS	88.7
114 P									313.1	3.7 CONANT	92.4
53 P								f 7.00	315.3	2.2 CASTELLA	94.6
Dunsmuir yard 106 P									318.3	3.0 CASTLE CRAG	97.6
BKP	9.30 PM	1.30 PM	5.30 AM						321.2	2.9 TO-R DUNSMUIR YARD	100.5
BKWOTP				s 2.15 AM	s 12.20 AM	s 12.05 AM	s 5.50 PM	s 7.20 AM	322.1	0.9 TO-R DUNSMUIR	101.4
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(101.4)	
	(5.00) 20.01	(5.00) 20.01	(5.00) 20.01	(2.55) 37.05	(2.40) 38.02	(2.40) 38.02	(3.35) 28.28	(3.50) 26.43		Time over District Average Speed per Hour	

Automatic Block System

Centralized Traffic Control

RULE 5. Schedule time and train-order time at Gerber apply at station sign.

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Dirigo	316.1	..

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
20	Any Station	Black Butte		Daily
16	Cottonwood	Klamath Falls	Gerber	Daily

No. 16 stop, if necessary, at Lakehead and Lamoine to dispatch parcel post.

WESTWARD

Mile Post Location			STATIONS	Distance from Dunsmuir	11	13	17	15	19
Timetable No. 53 June 2, 1946					FIRST CLASS				
					Cascade	Beaver	Oregonian	West Coast	Klamath
					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
13.8	Automatic Block System	TO-R	GERBER 1.0	101.4	AM s 6.50	AM s 7.05	PM s 1.30	PM s 3.20	AM s 2.20
14.8			KISKA 1.0	100.4					
15.8			PROBERTA 3.1	99.4					
18.9			RAWSON 4.5	96.3	6.41	6.56	1.20	3.00	2.08
23.4		TO	RED BLUFF 1.1	91.8	6.35	6.50	s 1.10	s 2.50	s 1.58
24.5			GLADE 4.4	90.7	6.33	6.48	1.03	2.37	1.49
28.9			BLUNT 4.7	86.3	6.27	6.42	12.57	2.30	1.42
33.6			HOOKER 6.8	81.6	6.21	6.36	12.50	2.24	1.35
40.4		TO	COTTONWOOD 3.8	74.8	6.13	6.28	12.42	s 2.15	s 1.25
44.2			CULP 2.9	71.0	6.09	6.24	12.38	2.08	1.19
47.1		TO	ANDERSON 6.4	68.1	6.06	6.21	12.34	s 2.03	s 1.15
53.5			GIRVAN 4.7	61.7	6.01	6.16	12.28	1.54	1.05
58.2		TO	REDDING 4.8	57.0	f 5.55	f 6.10	s 12.20	s 1.45	s 12.55
63.0	Centralized Traffic Control		SILVERTHORN 3.3	52.2					
66.3			CENTRAL VALLEY 4.1	48.9			f 12.05 PM	f 1.20	f 12.30 AM
70.4			McCOLL 2.8	44.8					
73.2			PITBRIDGE 4.4	42.0					
77.6			O'BRIEN 3.6	37.6					
81.2			MEAD 4.5	34.0					
85.7			LAKEHEAD 4.1	29.5					
89.8 96.7			DELTA 3.5	25.4				f 12.40 PM	
00.2			LAMOINE 3.8	21.9					
04.0			GIBSON 2.0	18.1					
06.0			FISHER 3.4	16.1					
09.4			SIMS 3.7	12.7					
13.1			CONANT 2.2	9.0					
15.3			CASTELLA 3.0	6.8				f 11.50 AM	
18.3			CASTLE CRAG 2.9	3.8					
21.2		TO-R	DUNSMUIR YARD 0.9	0.9					
22.1		TO-R	DUNSMUIR	0.0	4.10 AM	4.25 AM	10.20 AM	11.35 AM	10.50 PM
				(101.4)	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			Time over District Average Speed per Hour		(2.40) 38.02	(2.40) 38.02	(3.10) 32.02	(3.45) 27.04	(3.30) 28.97

RULE 5. Schedule time and train-order time at Gerber apply at station sign.

No. 15 stop, if necessary, at O'Brien to dispatch parcel post.

BLACK BUTTE SUBDIVISION

EASTWARD

Timetable No. 53

June 2, 1946

Capacity of sidings in car lengths		THIRD CLASS 630 Freight	628 Freight	626 Freight	FIRST CLASS 16 West Coast	20 Klamath	328 Shasta	18 Oregonian	14 Beaver	12 Cascade	Mile Post Location				STATIONS	Distances from Dunsmuir Yard
		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily						
Dunsmuir yard	BKP										321.2		TO-R		DUNSMUIR YARD	0.0
	BKWOTP				PM 6.05	AM 7.40	AM 3.00	AM 2.45	AM 12.30	AM 12.15	322.1		TO-R	0.9	DUNSMUIR	0.9
	P										325.4	Centralized Traffic Control		3.3	SHASTA SPRINGS	4.2
116	P										326.1			0.7	SMALL	4.9
25 Spur	P										327.6			1.5	CANTARA	6.4
147	P										331.4			3.8	MOTT	10.2
120	P										333.5			2.1	AZALEA	12.3
101	WYP				s 6.55	s 8.35	s 3.55				336.7			3.2	MOUNT SHASTA	15.5
118	P										339.1			2.4	UPTON	17.9
123	P										342.0 342.3			2.9	DEETZ	20.8
210	Yard Limits WYP	PM 8.15	PM 12.10	AM 4.10	7.15	**9.05**	s 4.10 AM	4.00	1.25	1.10	345.2		TO	2.9	BLACK BUTTE	23.7
107	P	8.35	12.30	4.30	7.28	9.18		4.14	1.38	1.23	352.2			7.0	HOTLUM	30.7
106	P	**8.53**	12.50	4.50	7.38	9.27		4.24	1.48	1.33	357.2		TO	5.0	BOLAM	35.7
107	P	9.08	1.02	5.02	7.44	9.32		4.29	1.53	1.38	360.7			3.5	ANDESITE	39.2
111	P	9.20	1.14	5.14	7.51	**9.40**		4.35	1.59	1.44	364.8			4.1	COUGAR	43.3
E 111 W117	WYP	9.40	1.35	5.35	f 8.03	9.48		4.45	2.07	1.52	368.5		TO-R	3.7	GRASS LAKE	47.0
96	P	9.51	1.46	5.46	**8.15**	9.56		4.52	**2.17**	2.00	373.1	Automatic Block System		4.6	ERICKSON	51.6
109	P	10.00	1.55	5.55	8.22	10.02		4.58	**2.26**	**2.11**	377.2			4.1	PENOYAR	55.7
	YP				s 8.29	s 10.10					380.6			3.4	LEAF	59.1
102	WP	10.08	2.03	6.03	8.31	f 10.14		5.04	2.34	**2.20**	381.9		TO	1.3	BRAY	60.4
77	P	10.16	2.11	6.11	8.36	10.20		5.10	2.39	2.27	386.0			4.1	KEGG	64.5
103	P	10.23	2.18	6.18	8.41	10.26		5.15	2.44	2.32	390.0			4.0	JEROME	68.5
E 94 W 89	Yard Limits BKWYP	10.31	2.26	6.26	8.46	f 10.31		5.20	2.49	2.37	394.0		TO	4.0	MT. HEBRON	72.5
56	P				f 8.50	s 10.36					396.7		TO	2.7	MACDOEL	75.2
102	P	10.41	2.36	6.36	8.52	10.41		5.25	2.54	2.42	398.3			1.6	SOMERSET	76.8
106	P	10.48	2.43	6.43	8.57	10.47		5.30	2.58	2.47	402.6			4.3	MAY	81.1
102	BKP	10.55	2.50	6.50	s 9.04	s 10.55		5.35	3.04	2.51	407.1		TO	4.5	DORRIS	85.6
56	P	11.03	2.58	6.58	9.10	11.03		5.41	3.10	2.57	411.6			4.5	CALOR	90.1
102	P	11.09	3.04	7.04	9.14	11.08		5.46	3.14	3.01	415.6			4.0	WORDEN	94.1
56	P	11.14	3.09	7.09	9.17	11.12		5.50	3.18	3.04	418.2			2.6	ADY	96.7
97	P	11.20	3.15	**7.15**	9.22	11.17		5.54	3.23	3.08	422.3			4.1	MIDLAND	100.8
Klamath Falls yard 76	P	11.27	3.22	7.22	9.27	11.23		5.59	3.28	3.13	426.2			3.9	TEXUM	104.7
	BKWOTYP										428.7		TO-R	2.5	KLAMATH FALLS YARD	107.2
	BKWOTYP	11.35 PM	3.30 PM	7.30 AM	s 9.35 PM	s 11.30 AM		s 6.05 AM	s 3.35 AM	s 3.20 AM	429.5		TO-R	0.8	KLAMATH FALLS	108.0
		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					(108.0)	
		(3.20) 25.24	(3.20) 25.24	(3.20) 25.24	(3.30) 30.60	(3.50) 27.91	(1.10) 19.54	(3.20) 32.13	(3.05) 34.68	(3.05) 34.68					..............Time over District.............. ....Average Speed per Hour........	

RULE 5. Schedule time and train-order time for first-class trains at Klamath Falls apply at passenger station.

Water Supply—Three-fourths mile east of Cantara.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Pioneer.........(Spur)	335.1	..
Kegg Pit..............	386.9	..

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
16	Shasta Springs....................	Klamath Falls...	Gerber.........	May 15 to Sept. 30
16	Black Butte.......................	Klamath Falls...	Sacramento.....	Daily
20	Shasta Springs....................	Klamath Falls...	Davis..........	Daily

No. 16 stop at Kegg Pit Sunday for employes.

BLACK BUTTE SUBDIVISION

WESTWARD

FIRST CLASS

Timetable No. 53
June 2, 1946

Centralized Traffic Control
Automatic Block System

Mile Post Location		STATIONS	Distance from Klamath Falls	11 Cascade Arrive Daily	13 Beaver Arrive Daily	17 Oregonian Arrive Daily	15 West Coast Arrive Daily	327 Shasta Arrive Daily	19 Klamath Arrive Daily
321.2	TO-R	**DUNSMUIR YARD** 0.9	108.0	AM s 4.00	AM s 4.15	AM s 10.05	AM s 11.20	PM s 9.45	PM s 10.25
322.1	TO-R	**DUNSMUIR** 3.3	107.1	AM s 4.00	AM s 4.15	AM s 10.05	AM s 11.20	PM s 9.45	PM s 10.25
325.4		**SHASTA SPRINGS** 0.7	103.8						
326.1		**SMALL** 1.5	103.1						
327.6		**CANTARA** 3.8	101.6						
331.4		**MOTT** 2.1	97.8						
333.5		**AZALEA** 3.2	95.7						
336.7		**MOUNT SHASTA** 2.4	92.5			s 9.20	s 10.35	s 9.00	s 9.40
339.1		**UPTON** 2.9	90.1						
342.0 342.3		**DEETZ** 2.9	87.2						
345.2	TO	**BLACK BUTTE** 7.0	84.8	3.05	3.20	**9.05**	10.15	8.45 PM	9.20
52.2		**HOTLUM** 5.0	77.3	2.50	3.05	8.53	10.02		9.02
57.2	TO	**BOLAM** 3.5	72.3	2.40	2.55	8.44	9.52		f **8.53**
60.7		**ANDESITE** 4.1	68.8	2.35	2.50	8.39	9.46		8.46
64.8		**COUGAR** 3.7	64.7	2.30	2.45	8.34	**9.40**		8.38
68.5	TO-R	**GRASS LAKE** 4.6	61.0	2.25	2.40	8.29	9.35		f 8.30
73.1		**ERICKSON** 4.1	56.4	**2.17**	2.32	8.21	9.27		**8.15**
77.2		**PENOYAR** 3.4	52.3	**2.11**	**2.26**	8.14	9.20		f 8.08
80.6		**LEAF** 1.3	48.9						s 8.02
81.9	TO	**BRAY** 4.1	47.6	2.05	**2.20**	8.08	9.13		7.58
86.0		**KEGG** 4.0	43.5	1.58	2.13	8.01	9.06		7.51
90.0		**JEROME** 4.0	39.5	1.52	2.07	7.55	9.00		7.46
94.0	TO	**MT. HEBRON** 2.7	35.5	1.48	2.03	7.51	8.54		s 7.41
96.7	TO	**MACDOEL** 1.6	32.8						f 7.36
98.3		**SOMERSET** 4.3	31.2	1.43	1.58	7.46	8.48		7.34
02.6		**MAY** 4.5	26.9	1.38	1.53	7.41	8.43		7.29
07.1	TO	**DORRIS** 4.5	22.4	1.34	1.49	f 7.36	s 8.37		s 7.24
11.6		**CALOR** 4.0	17.9	1.28	1.43	7.29	8.30		7.16
15.6		**WORDEN** 2.6	13.9	1.22	1.37	7.24	8.24		7.10
18.2		**ADY** 4.1	11.3	1.19	1.34	7.20	8.20		7.05
22.3		**MIDLAND** 3.9	7.2	1.14	1.29	**7.15**	8.15		7.00
26.2		**TEXUM** 2.5	3.3	1.09	1.24	7.10	8.10		6.55
28.7	TO-R	**KLAMATH FALLS YARD** 0.8	0.8						
29.5	TO-R	**KLAMATH FALLS**	0.0	1.05 AM	1.20 AM	7.05 AM	8.05 AM		6.50 PM
		(108.0)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
		Time over District Average Speed per Hour		(2.55) 36.72	(2.55) 36.72	(3.00) 35.70	(3.15) 32.95	(1.00) 22.80	(3.35) 29.88

RULE 5. Schedule time and train-order time for first-class trains at Klamath Falls apply at passenger station.

Westward freight trains using siding at Mt. Hebron to meet or permit trains to pass, will make a cut in front of train-order office sufficient to clear the county road crossing.

Water Supply—Three-fourths mile east of Cantara.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
19	Kegg Pit....................MP 386.9	Any Station....	Any Station....	Sun., Wed., & Fri.
19	Black Butte..........................	Davis..........	Klamath Falls...	Daily
19	Shasta Springs.....................	Davis..........	Klamath Falls...	Daily

No. 17 reduce speed at Dorris for U. S. Mail or newspapers.

KIRK SUBDIVISION

EASTWARD

Capacity of sidings in car lengths		SECOND CLASS				FIRST CLASS					Mile Post Location	Automatic Block System	Timetable No. 53 June 2, 1946 STATIONS	Distance from Klamath Falls
		636 Freight	634 Freight	384 G. N. Ry. Freight	632 Freight	16 West Coast	20 Klamath	18 Oregonian	14 Beaver	12 Cascade				
		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				
Klamath Falls yd.	BKWOTYP	PM 4.00	AM 9.10	AM 8.45	AM 1.15	PM 9.50	AM 11.45	AM 6.20	AM 3.45	AM 3.30	429.5	TO-R	**KLAMATH FALLS**	0.0
	P	4.12	9.22	8.57	1.27	9.54	11.50	6.25	3.48	3.33	431.9		2.4 **CHELSEA**	2.4
102	P	4.22	9.32	9.07	1.37	10.00	AM 11.55	**6.35**	3.52	3.37	434.1		2.2 **WOCUS**	4.6
101	P	4.30	9.40	9.15	1.45	10.06	PM 12.01	6.43	3.57	3.42	438.9	TO	4.8 **ALGOMA**	9.4
107	P	4.36	9.46	9.22	1.51	10.11	12.07	6.49	4.02	3.47	442.6		3.7 **OUXY**	13.1
102	P	4.42	9.53	9.29	1.57	10.16	12.12	6.55	4.07	3.52	447.2	TO	4.6 **MODOC POINT**	17.7
103	P	4.50	10.01	9.37	2.05	10.21	12.19	7.00	4.12	3.57	451.8		4.6 **LOBERT**	22.3
Yd. Lmts. 187	KWYP	4.59	10.11	9.47	2.14	s 10.30	s 12.29	**7.10**	4.18	4.03	456.7	TO	4.9 **CHILOQUIN**	27.2
82	P	5.01	10.13	9.49	2.16						458.0		1.3 **PINE RIDGE**	28.5
105	P	5.12	10.23	10.01	2.26	10.38	12.37	7.18	4.23	4.08	461.1		3.1 **BRAYMILL**	31.6
97	P	**5.29**	10.38	10.21	2.41	10.45	12.44	7.26	4.28	4.13	465.3		4.2 **CALIMUS**	35.8
E 112 Yard Limits W 107	WYP	5.41	10.50	10.36	2.53	f 10.52	12.53	7.35	4.34	4.19	470.3	TO	5.0 **KIRK**	40.8
95	P	5.48	10.57	10.44	3.00	10.57	1.00	7.41	4.39	4.24	474.5		4.2 **FUEGO**	45.0
95	P	5.56	11.05	10.51	3.08	11.03	1.06	7.46	4.44	4.29	478.6		4.1 **CHINCHALO**	49.1
96	WP	6.04	11.13	10.59	3.16	11.10	1.14	7.52	4.49	4.34	483.4	TO	4.8 **LENZ**	53.9
95	P	6.12	11.20	11.09	3.24	11.16	1.20	7.57	4.54	4.39	488.2		4.8 **MAZAMA**	58.7
106	P	6.19	11.27	11.17	3.31	11.22	1.25	8.02	4.59	4.44	492.6	TO	4.4 **YAMSAY**	63.1
95	P	6.27	11.35	11.25	3.39	**11.36**	1.30	8.08	5.05	4.50	498.0		5.4 **DIAMOND LAKE**	68.5
95	BKP	6.37	11.45	11.35 AM	3.49	f **11.42**	s 1.38	8.15	**5.11**	4.56	503.3	TO-R	5.3 **CHEMULT**	73.8
96	WYP	6.44	AM 11.52		3.57	PM 11.55	1.46	8.20	5.15	**5.00**	507.2		3.9 **PAUNINA**	77.7
96	P	6.57	PM 12.05		4.10	AM 12.05	f 1.57	8.29	5.23	5.08	514.8	TO	7.6 **MOWICH**	85.3
95	P	7.05	12.13		4.18	12.11	2.04	8.35	5.29	5.14	519.5		4.7 **KOTAN**	90.0
96	P	7.12	12.20		4.26	12.18	f 2.12	8.41	**5.34**	5.20	524.0		4.5 **UMLI**	94.5
Yard Limits Psgr. 45	BKWOYP	7.20 PM	12.30 PM		**4.35** AM	s 12.25 AM	s 2.20 PM	s 8.50 AM	s 5.40 AM	s **5.25** AM	528.6	TO-R	4.6 **CRESCENT LAKE**	99.1
		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(99.1)	
		(3.20) 29.73	(3.20) 29.73	(2.50) 26.00	(3.20) 29.73	(2.35) 38.32	(2.35) 38.32	(2.30) 39.60	(1.55) 51.70	(1.55) 51.70			............Time over District............ ....Average Speed per Hour........	

RULE 5. Schedule time and train-order time for first-class trains at Klamath Falls apply at station sign, and for No. 384 at train-order office.

Main track at Crescent Lake between switches of passenger siding may be used by any first-class train if track is known to be clear. Passenger siding is between main track and station building.

Freight trains on siding Chemult for passenger trains must provide passageway for passengers to station, member of crew to be stationed at the cut. Train must not be recoupled until all passengers have passed to station side.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Gilchrist Jct.	513.2	

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
12	Chemult		Davis	Daily
18	Chiloquin Chemult	Eugene	Davis	Daily
18	Modoc Point		Davis	Daily
20	Algoma Modoc Point Kirk Chinchalo Mazama	Eugene	Gerber	Daily
20	Lenz	Eugene	Klamath Falls	Daily
16	Algoma Modoc Point	Eugene	Klamath Falls	Daily

No. 20 stop on flag at Algoma, Modoc Point, Kirk, Lenz, Yamsay and Mowich Tuesday and Saturday to detrain employes.

No. 16 stop, if necessary, at Algoma and Modoc Point for U. S. Mail or newspapers.

KIRK SUBDIVISION

Mile Post Location			Timetable No. 53 June 2, 1946	Distance from Crescent Lake	WESTWARD FIRST CLASS				
					17 Oregonian	**15** West Coast	**19** Klamath	**11** Cascade	**13** Beaver
			STATIONS		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
					AM	AM	PM	AM	AM
29.5	Automatic Block System	TO-R	**KLAMATH FALLS** 2.4	99.1	s 6.45	s 7.50	s 6.30	s 12.55	s 1.10
31.9			**CHELSEA** 2.2	96.7	6.40	7.45	6.23	12.50	1.05
34.1			**WOCUS** 4.8	94.5	**6.35**	7.39	6.19	12.47	1.01
38.9		TO	**ALGOMA** 3.7	89.7	6.29	7.33	f 6.13	12.42	12.56
42.6			**OUXY** 4.6	86.0	6.24	7.28	6.06	12.38	12.51
47.2		TO	**MODOC POINT** 4.6	81.4	6.19	7.22	f 6.00	12.33	12.46
51.8			**LOBERT** 4.9	76.8	6.14	7.17	5.52	12.28	12.41
56.7		TO	**CHILOQUIN** 1.3	71.9	s 6.07	s **7.10**	s 5.45	12.22	12.35
58.0			**PINE RIDGE** 3.1	70.6					
61.1			**BRAYMILL** 4.2	67.5	6.00	7.04	5.35	12.17	12.31
65.3			**CALIMUS** 5.0	63.3	5.55	6.59	**5.29**	12.12	12.26
70.3		TO	**KIRK** 4.2	58.3	5.49	6.52	f 5.21	12.06	12.19
74.5			**FUEGO** 4.1	54.1	5.44	6.47	5.13	12.02 AM	12.14
78.6			**CHINCHALO** 4.8	50.0	5.39	6.42	5.07	11.57 PM	12.09
83.4		TO	**LENZ** 4.8	45.2	5.34	6.36	5.02	11.52	12.04 AM
88.2			**MAZAMA** 4.4	40.4	5.29	6.31	4.56	11.47	11.59 PM
92.6		TO	**YAMSAY** 5.4	36.0	5.24	6.26	4.51	11.42	11.54
98.0			**DIAMOND LAKE** 5.3	30.6	5.18	6.19	4.45	**11.36**	11.48
03.3		TO-R	**CHEMULT** 3.9	25.3	s **5.11**	f 6.11	s 4.39	11.30	**11.42**
07.2			**PAUNINA** 7.6	21.4	**5.00**	6.03	4.31	11.25	11.36
14.8		TO	**MOWICH** 4.7	13.8	4.52	5.54	f 4.21	11.17	11.27
19.5			**KOTAN** 4.5	9.1	4.47	5.45	4.13	11.11	11.21
24.0			**UMLI** 4.6	4.6	4.41	**5.34**	f 4.07	11.05	11.15
28.6		TO-R	**CRESCENT LAKE**	0.0	**4.35** AM	**5.25** AM	4.00 PM	11.00 PM	11.10 PM
			(99.1)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			............Time over District............		(2.10)	(2.25)	(2.30)	(1.55)	(2.00)
			........Average Speed per Hour........		45.94	40.90	39.60	51.70	49.55

RULE 5. Schedule time and train-order time for first-class trains at Klamath Falls apply at station sign, and for No. 384 at train-order office.

Main track at Crescent Lake between switches of passenger siding may be used by any first-class train if track is known to be clear. Passenger siding is between main track and station building.

Freight trains on siding Chemult for passenger trains must provide passageway for passengers to station, member of crew to be stationed at the cut. Train must not be recoupled until all passengers have passed to station side.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
15	Modoc Point....................	....	Eugene..........	Daily
19	Paunina.................... Diamond Lake.................... Mazama....................	Any Station....	....	Monday
19	Chinchalo.................... Fuego....................	Any Station....	....	Saturday
19	Lenz....................	Klamath Falls...	Eugene..........	Daily

No. 15 stop on flag at Mowich, Yamsay, Lenz, Kirk, Modoc Point, and Algoma on Tuesday and Saturday to entrain employes.

BLACK BUTTE SUBDIVISION

EASTWARD							WESTWARD	
Capacity of sidings in car lengths	THIRD CLASS	FIRST CLASS	Mile Post Location		Timetable No. 53 June 2, 1946	Distance from Ashland	FIRST CLASS	THIRD CLASS
	624 Freight	328 Shasta					327 Shasta	623 Freight
	Leave Daily	Leave Daily			STATIONS		Arrive Daily	Arrive Daily
Yard Limits 210 WYP		AM 4.15	345.2	Automatic Block System	TO **BLACK BUTTE**	85.1	PM s 8.40	AM 10.15
			347.0 345.8		1.8 **IGERNA**	83.3		
Yard Limits 53 BKWOYP	AM 2.00	s 4.32	348.4		2.6 TO-R **WEED**	80.7	s 8.22	9.45
44 WYP	2.30	s 4.45	353.4		5.0 **EDGEWOOD**	75.7	s 8.11	9.05
67 P	2.50	s 5.02	361.0		7.6 TO **GAZELLE**	68.1	s 7.55	8.30
80 P	3.10	s 5.13	369.1		8.1 **GRENADA**	60.0	s 7.39	7.55
Yard Limits 62 P	3.40	s 5.30	375.5		6.4 TO **MONTAGUE**	53.6	s 7.24	7.30
63 YP	3.55	f 5.40	380.7		5.2 **SNOWDON**	48.4	f 7.10	7.05
51 P	4.10	f 5.53	386.2		5.5 **AGER**	42.9	f 7.01	6.40
Yard Limits 73 KWYP	4.45	s **6.15**	393.1		6.9 TO-R **HORNBROOK**	36.0	s 6.44	**6.15**
48 P	**5.25**	s 6.43	401.8		8.7 TO **HILT**	27.3	s 6.18	**5.25**
57 P	5.55	f 7.00	407.4		5.6 **GREGORY**	21.7	f 6.01	4.55
73 TP	6.30	s 7.15	412.2		4.8 **SISKIYOU**	16.9	s 5.46	4.30
55 WP	7.10	7.37	419.3		7.1 **STEINMAN**	9.8	5.24	3.50
68 P	7.25	f 7.46	422.9		3.6 **MISTLETOE**	6.2	f 5.13	3.30
Ashland yard 58 BKWOTP	7.50 AM	s 8.00 AM	429.1		6.2 TO-R **ASHLAND**	0.0	4.55 PM	3.00 AM
	Arrive Daily	Arrive Daily			(85.1)		Leave Daily	Leave Daily
	(5.50) 13.83	(3.45) 22.69			..........Time over District.......... ....Average Speed per Hour........		(3.45) 22.69	(7.15) 11.47

RULE 5. Main track at Ashland between switches of siding may be used by any first-class train if track is known to be clear. Siding is south of main track, and extends from switch 262 feet east of section house to switch 150 feet east of freight house.

GS and AC class engines not permitted to operate between Hornbrook and Ashland.

Water Supply: One-fourth mile east of Grenada
MP 390.5
MP 403.6 (Emergency only)

Capacity of sidings in car lengths	Mile Post Location	EAST-WARD ↓	Timetable No. 53 June 2, 1946 Keswick Branch STATIONS	WEST-WARD ↑	Distance from Coram
E 181 Yard Limits W 96 BKWIP	258.2		TO **REDDING**		12.8
29	263.9		5.7 **KESWICK**		7.1
P	267.2		3.3 TO **MATHESON**		3.8
46 P	268.0		0.8 **MOTION**		3.0
75 P	271.0		3.0 **CORAM**		0.0
			(12.8)		

ADDITIONAL STATIONS

NAME	Mile Post	Capac-ity
Ashland line		
Peters and Daly..(Spur)	426.2	..
Belleview..........	426.8	..
Keswick Branch		
Middle Creek..........	261.0	..
Kesdam..........	262.3	..
Central Mine..........	265.9	..

MERRILL SUBDIVISION

EASTWARD THIRD CLASS Capacity of sidings in car lengths		616 Freight Leave Daily	Mile Post Location		Timetable No. 53 June 2, 1946 STATIONS	Distance from Klamath Falls	WESTWARD THIRD CLASS 617 Freight Arrive Daily
Yard Limits		AM	457.3				
	BKWOYP	8.00	458.3	TO-R	**ALTURAS**	97.5	PM 2.15
61			459.9		1.6 **JUNIPER**	95.9	
72	P	8.30	470.6		10.7 **FLETCHER**	85.2	1.40
75	WYP	8.55	477.7	TO	7.1 **CANBY**	78.1	1.20
75	YP	9.45	485.4		7.7 **AMBROSE**	70.4	12.50
72	P	9.55	489.8		4.4 **BOLES**	66.0	12.25
81	WP	10.05	493.6		3.8 **HACKAMORE**	62.2	12.15 PM
73	P	10.20	500.8		7.2 **MEARES**	55.0	11.50 AM
105	WYP	10.38	506.1	TO	5.3 **PEREZ**	49.7	11.30
73	P	**10.58**	515.4		9.3 **CORNELL**	40.4	**10.58**
Spur 4	YP		521.9		6.5 **STALEY**	33.9	
73	WP	11.20	524.3		2.4 **STRONGHOLD**	31.5	10.38
	I		525.4		1.1 **Great Northern Ry. Crossing**	30.4	
40	P	11.30	529.7	TO	4.3 **TULE LAKE**	26.1	10.28
97	P	11.37	533.2		3.5 **HATFIELD**	22.6	10.20
73	P	AM 11.47	537.9	TO	4.7 **MERRILL**	17.9	10.10
73	P	PM 12.07	547.1		9.2 **STUKEL**	8.7	9.50
Klamath Falls yd.	BKWOTYP	12.35 PM	555.0	TO-R	7.9 **KLAMATH FALLS YARD**	0.8	9.30 AM
	BKWOTYP		555.8	TO-R	0.8 **KLAMATH FALLS**	0.0	
		Arrive Daily			(97.5)		Leave Daily
		(4.35) 21.27			............Time over District............ ....Average Speed per Hour.........		(4.45) 20.88

Take water at Hackamore and Stronghold only in emergency.

Capacity of sidings in car lengths		EAST-WARD ↓ Mile Post Location			Timetable No. 53 June 2, 1946 Lakeview Branch STATIONS	WEST-WARD ↑ Distance from Lakeview
Yard Limits		458.3				
	BKWOYP	456.8	TO-R		**ALTURAS**	55.5
16	P	466.9		10.1	**SURPRISE**	45.4
21	P	478.6		11.7	**DAVIS CREEK**	33.7
20	P	491.2	TO	12.6	**WILLOW RANCH**	21.1
15		497.8		6.6	**FAIRPORT**	14.5
Yard Limits	BKWYP	512.3	TO-R	14.5	**LAKEVIEW**	0.0
					(55.5)	

Water Supply: MP 485.8

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Alturas line		
Copic....................	520.3	
Homestead...........	525.6	..
Tuber....................	527.7	..
Malone..................	536.0	..
Lost River............	541.0	..
Hosley..................	543.8	..
Gem......................	548.1	..
Spring Lake..........	550.3	..

RULE 2. Watch inspectors:
San Francisco, S. A. Pope, Manager of Time Service, 65 Market St.
Red Bluff...G. C. Wilkins & Son Ashland...........C. R. Ramsey
Redding...Adolph F. Dobrowsky Klamath Falls
Dunsmuir..........J. A. Porter ....Lawrence Bertram
Weed ....W. Martineau Alturas ....Wm. Mayben
Lakeview...........A. E. Rugg

RULE 2 (A). Watches subject to inspection must be presented monthly, between first and fifteenth, instead of semi-monthly, to a designated inspector.

RULE 4. Designated holidays:
New Year's Day, January 1st.
Washington's Birthday, February 22nd.
Decoration Day, May 30th.
Independence Day, July 4th.
Labor Day, First Monday in September.
Thanksgiving Day, Fourth Thursday in November.
Christmas Day, December 25th.

RULE 10 (H). Where yellow signals are displayed within limits of a length of track over which a maximum speed is designated in train-order or timetable bulletin and no maximum speed is otherwise specified for the particular section of track protected by these yellow signals, trains must not exceed fifteen miles per hour thereover.

RULE 10 (J). Certain slow boards have the word "Signal" above the figures. Such slow boards in approach to a distant signal indicate the speed that must not be exceeded while engine is passing the distant signal three-fourths mile beyond slow board, unless distant signal can plainly be seen to be displaying proceed indication; and such slow boards in approach to a home signal indicate the speed that must not be exceeded while approaching home signal three-fourths mile beyond the slow board, until indication of home signal can plainly be seen.

RULE 15. Second paragraph is changed to read as follows:
"The explosion of two torpedoes is a signal to proceed with caution for not less than one mile."

RULE 17. Mars signal light on engines shall be used when engine is moving at night, and in foggy or stormy weather. It must be dimmed or extinguished approaching passenger stations, and at other points as prescribed by rules.

RULE 26 is revised to read as follows:
"A blue signal or sign reading 'Men at Work' displayed on engineer's side of cab of an engine or at one or both ends of a car, cut of cars, or at the rear of a train, indicates that workmen are under or about same and the engine, car, cut of cars, or train must not be coupled to nor moved by any method, nor other equipment placed so as to obstruct the view of the blue signal or sign.

"Blue signal or sign must not be removed by any person except the one placing the signal or sign, or someone authorized by him to do so.

"On designated tracks (repair, cleaning, servicing, etc.) where employes work, a sign reading 'Stop—Men at Work' must be placed on the track and switches leading to such track locked; and from sunset to sunrise a blue light must be displayed. Employes placing such sign and locking switches, only are authorized to change same.

"When repair work is to be done under or about an engine or cars in a train, where movement of same would endanger employees engaged in such work, and a blue signal or sign is not available, the engineman of engine handling train must be notified by employe engaged in such work and a complete understanding had to prevent movement. After work is completed the same employe must notify enginemen."

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 99. Third, fourth and sixth paragraphs of Rule 99 are changed to read as follows:

"If recalled from a point less than one-half mile from rear of train, he must, if safety to train requires, leave lighted fusee at proper intervals and, if conditions warrant, also place two torpedoes on the rail three rail-lengths apart.

"If not recalled, one-half mile from rear of train he must place one torpedo on the rail; one mile from rear of train, or when recalled, if one-half mile or more from rear of train, he must place two torpedoes on the rail three rail-lengths apart. If conditions such as curves, foggy or stormy weather or descending grade require, he must continue back a greater distance, placing two additional torpedoes.

"When flagman has reached the required flagging distance and has placed torpedoes as required, he may then return to the single torpedo where he must remain until relieved by another flagman or recalled. When recalled, he may remove the single torpedo and return, leaving lighted fusee at such intervals as conditions warrant."

RULE 210 is modified to provide that when using revised Train Order Form CS-2600, which has the words "Repeated and Complete" printed at bottom of the form, operator will write or typewrite the time and his or her name in the space provided on the order, after it has been made complete by train dispatcher.

RULE 221. First sentence of third paragraph is amended as follows:

"When a train order is to be delivered to an approaching train, or orders are held for any other train in the same direction, except those originating, the operator must not clear the signal."

RULE 271 is revised to read as follows:

"Automatic block signals will bear number plates attached to signal masts. Automatic semaphore home signal arms will be painted red and will be distinguished by white stripe near end of semaphore arm.

"The number plate on a distant light signal will bear the prefix 'D'.

"Interlocking signals will not bear number plates.

"Absolute signals will not bear number plates, but will have plates bearing the letter 'A'.

"Interlocking and absolute semaphore home signal arms will be painted red.

"Aspects as illustrated or referred to in these rules are shown by the position of semaphore arms or color of lights, or both, as seen from an approaching train. Other combinations may be used."

RULE 295 is revised to read as follows:

"Interlocking or absolute signals may be made part of the automatic block system adjoining interlocking or centralized traffic control limits. When so arranged they will be designated 'semi-automatic' and distinguished by a plate bearing the letters 'SA'. Trains stopped by such signals must observe interlocking or centralized traffic control rules within the interlocking or centralized traffic control limits, and Rule 509, 509 (F) or 509 (J), as the case may be, within the automatic portion of the block beyond interlocking or centralized traffic control limits."

RULE 297. Following paragraph is added:

A train, if delayed in the block, must proceed with caution to the next signal.

RULE 505. AUTOMATIC BLOCK SYSTEM

PUSH BUTTONS

Where signal protection is provided for movements from an adjacent track to main track, push buttons and lights are installed in box near each of the two signals, with time-release feature, to clear signals on one track when the control circuit on the other track is occupied.

Train on main track to let train on siding pass may clear signal on siding by pressing button bearing number of signal on siding until light appears. Train on siding to let train on main track pass should not pass Approach Circuit sign, but when necessary to do so, may clear signal on main track by pressing button bearing number of signal on main track. Further instructions posted inside push button box.

ELECTRIC SWITCH LOCKS

Where electric switch locks are installed, lock-box door must not be opened if movement is to be made into a track leading from main track until engine or car is standing within 150 feet of the switch; or if movement is to be made from such track, or through a crossover to a main track, until switch indicator indicates block clear on opposite track. Within C.T.C. limits dispatcher's permission must also be obtained before lock-box door is opened.

After lock-box door is opened lock lever cannot be moved to opposite position to release switch for hand throwing until indicator in lock box indicates "Unlocked".

Lock lever must not be returned to lock position until all movements over the switch are completed, switch returned to normal position and locked. Within C.T.C. limits dispatcher must also be notified by telephone when completed.

When switch indicators indicate "block occupied", instructions posted inside lock-box for operation of push button to start time-release must be complied with if movement is to be made to main track while approach circuit is occupied by another train, in addition to providing flag protection when necessary.

Emergency lock release to be used only in case of electrical or mechanical failure, as indicated by failure of time-release to function after several minutes. When necessary to break seal on emergency lock release, dispatcher must be notified immediately, and movement made only after flag protection provided on both tracks.

RULE 535. A spring switch with facing point lock must not be trailed through unless switch target displays the letters "SS" in normal position, or switch has been lined for the movement.

When a signal with triangular number plate protecting a spring switch with facing point lock displays stop indication, member of crew must open and close spring switch by hand, removing any obstruction. If signal does not then display proceed indication, switch must be hand thrown for the movement.

When a spring switch or spring derail is hand thrown, trainman so setting same must again set it for normal position after movement has been completed, unless he has arranged for another trainman to do so.

RULE 536. Wheels of tenders must not be considered as engine wheels.

RULES 705 and **707** are revised to read as follows:

"LETTER TYPE INDICATORS

"705. Within block system limits, at locations specified in timetable, letter type indicators may be used. These indicators will be attached to an automatic block signal, and will display indications by illuminated letters, which will supersede the superiority of trains within defined limits.

"S—Take siding (Fig. 1).

"M—Proceed on main track (Fig. 2).

"Other letters, or combinations of letters may be used.

"S-707. When the letter 'M' is displayed, train is thereby given superiority over all trains to the fouling point of the switch at which an opposing train may enter siding or receiving track, and will hold main track at the station, but must observe any restrictions that may be imposed by automatic block or other signals.

"D-707. When the letter 'M' is displayed approaching a siding, or at the initial switch of a siding, train will hold main track; when displayed on a siding near the leaving end of siding, train will enter main track and in either case train is thereby given superiority over all following trains to the point designated in timetable but must observe any restriction that may be imposed by automatic block or other signal."

GENERAL REGULATIONS

RULE 825. Portable rail skids are hung on posts at lower end of sidings at:

Glade...and all sidings in C.T.C. System except Silverthorn, Pitbridge, O'Brien and Mead.

When necessary to leave cars on these sidings, permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative, before engine is detached. Trains picking up cars from these sidings must remove rail skid and return it to proper post and lock it in place with switch lock.

RULE 834. Will not apply to trains consisting entirely of logs.

RULE 837. Fifth paragraph is revised to read as follows:

Cars standing on grade must not be coupled onto, in descending direction, without knowing sufficient hand brakes are set to prevent uncontrolled movement of any such cars should coupling fail or cars not be securely coupled together.

In yards cars must not be left closer than one car length from fouling point of other tracks.

RULE 849. Steam valve on Pullman troop sleepers cannot be opened while train is in motion, and when such car is on rear of train steam line must not be cut in any portion of train until valve is closed on the car on each side of coupling to be opened, to avoid burning by steam.

RULE 827. TRAIN INSPECTION

Freight trains may make a continuous run of not more than fifty miles without a stop for inspection, if, in the judgment of conductor and engineer no stops are necessary.

At points where freight trains stop for inspection, they will do so between switches to permit light engines to pass.

Trains, including military trains, made up in part of freight cars or caboose equipped with cast iron wheels, are required to comply with rules and timetable instructions applying to freight trains as they relate to stopping for train inspection, and speed restrictions.

When practicable, trainman must ride rear platform or in rear car on all trains, in position where he can observe fire that might be set from moving train, when passing through wooden lined tunnels and over long, open-decked wood trestles.

When a train handling logs takes siding to meet a train or to allow a train to pass, train must be thoroughly inspected to insure proper clearance for safe passage of trains, and no move made until expected train has been met or passed.

Between sunset and sunrise, two Dietz lanterns must be placed on rear of caboose and trainmen must observe track for fallen logs.

Cars bearing placards denoting contents are explosive, inflammable, poisonous, or otherwise dangerous, must be given careful inspection at all points where train inspection is made.

AIR BRAKE RULES

RULE 25 (b). Rear end test must be made as indicated in accordance with Air Brake Rule 25:

When helper engine is in train, after rear end test has been made, the lead engineer must not attempt to start until helper engineer has sounded signal 14 (b). The helper engineer must not sound whistle until signal is received from rear.

Whenever passenger equipment is handled on freight trains and a rear end test is made, considerable time must elapse before brake pipe pressure will build up sufficiently to release the brakes on passenger equipment. Conductor will advise engineer when they have such passenger equipment on rear of train so he may allow a sufficient length of time for brakes to release before attempting to start train.

MISCELLANEOUS

1. Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water, and where lead engine cannot handle forward portion without assistance of helper, latter must not be cut off until forward portion has stopped beyond water tank.

4. Helper service:

No helper engine will be placed behind wooden underframe cars or cabooses.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

In no case will more than one helper engine be placed behind steel underframe cabooses.

Helper engine must not be placed on head end of freight trains, except on trains consisting entirely of logs between Leaf and Grass Lake, and between Canby and Ambrose.

AC, AM or MM class engines must not be coupled together in helper service, and not more than two F, Mt or heavier class engines, or more than three smaller class engines, be coupled together in rear of train.

When coupled, larger engines must be placed ahead of smaller engines. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by 75% of the engine rating of the helper, or helpers coupled, next ahead of caboose.

Helper engines must be cut in ahead of any cars of wooden frame construction.

Air will be cut in on all helper engines, and engine must not be cut off when train is in motion

Helpers must not be operated backing except in emergency, and in such case engines should not push through a backing engine if it can be avoided.

On grades, road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

4 (a). For the purpose of pushing trains out of yards:

No engine will be placed behind wooden underframe caboose or other wooden frame equipment.

Engines weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through pusher engine.

Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employes to uncouple the pusher engine when cutting off.

In no case shall the knuckle be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

7. Capacity of sidings between clearance points is based on an average car length of 49 feet not including engines and caboose.

10. When a sign reading "Occupied Outfit Cars" is attached to switch lock, the outfit cars must not be coupled to, nor moved, until occupants have been notified, and permission given by foreman or his representative.

14. Enginemen will operate sprinklers on engines so equipped when passing through tunnels, and on all bridges. If engine is not equipped with sprinkler and it is possible to do so, tire coolers should be operated through tunnels and on bridges.

20. Handling of freight cars in trains behind passenger cars is prohibited except passenger equipment may be placed in head end of mixed trains when carrying personnel and equipment in connection with military and naval movements. This does not refer to a baggage, express, or mail car, or a caboose.

All cars moved in passenger trains must be equipped with steel-tired or all-steel wheels. When cars not so equipped are offered for movement, they will be handled in freight trains—passengers, if any, to move on passenger train

Wooden passenger-carrying cars, wooden baggage, express and other head-end cars, unless equipped with steel center sills and steel platforms, must not be used in passenger service.

Passenger equipment handled in freight trains must be placed between cars equipped with Carmer cutting lever.

Gas transport cars when handled in freight trains should be placed next ahead of caboose.

Cars with inoperative couplers, containing perishables or livestock, may be chained in train and moved to nearest available repair point. Other cars with defective couplers will be switched to the rear of caboose, using operative coupler by turning car. Car and caboose should be chained to prevent breaking away from train. Cars chained may be moved to nearest repair point in direction train is moving.

21. Employes are warned that it is dangerous to stand erect on top of cars or to ride on side of cars while passing points where impaired clearance exists and that they must protect themselves from injury.

There are numerous structures with impaired clearance on yard and station tracks on the division, and employes must be familiar with their locations and avoid personal injury.

SPEED RESTRICTIONS

*List of CCB (cross counter-balanced) engines:

All P-8 class, except engine 2470.

F-1 class: 3611, 3612, 3615, 3616, 3617, 3619, 3620, 3625, 3629, 3634, 3636, 3638, 3643, 3647, 3652;

F-3 class: 3653, 3654, 3655, 3656, 3657, 3658, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667;

F-4 class: 3668, 3670, 3671, 3672, 3674, 3675, 3676, 3677, 3678, 3679, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3692, 3693, 3695, 3696, 3697, 3698, 3699, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3709, 3711, 3715, 3716, 3717;

F-5 class: 3718, 3720, 3721, 3722, 3723, 3727, 3728, 3732, 3734, 3737, 3742, 3752, 3753, 3755, 3760, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769;

AC-6 class: 4126, 4127, 4128, 4130, 4131, 4132, 4133, 4135, 4136, 4137, 4138, 4139, 4140, 4141, 4142, 4143, 4144, 4146, 4147, 4148, 4149, 4150.

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Maximum speed for C-15-17-32, Mk-10-11 and MM-3 class engines 35 MPH when handling freight and mixed trains.

Maximum speed for S and SE class engines, 20 MPH, but must not exceed speed permitted freight and mixed trains and light engines.

Maximum speed for gas-electric cars running light forward, 50 MPH, but must not exceed speed permitted when handling passenger trains.

Engines backing must not exceed 20 MPH on all curves, and when approaching road crossings at grade.

Engines coupled tender to tender must not exceed speed permitted same engines running light backward.

Engines with tenders having water capacity 7,000 gallons or less, except classes 70-R-1 and 70-SC-1, must not exceed 50 MPH.

Diesel electric switch engines running forward, with train or light, may make maximum speed as shown below, except must not exceed speed permitted freight and mixed trains. These engines when backing may make speed shown below, except must not exceed speed permitted E class engines backing where such permitted speed is less than 30 MPH:

Classification	Running Forward With Train	Running Forward Light	Running Backward With Train or Light
DES-200	30	30	30
DES-1 to 7—100 to 107	40	40	40

Maximum speed of engines under following conditions running under own steam or hauled in train, must not exceed:

When all weight has been removed from any one pair of drivers	20 MPH
When all weight has been removed from only one wheel from any pair of drivers	30 MPH
When engine truck is removed	20 MPH
When main rod only is removed	30 MPH
When side rod only is removed	30 MPH
When both main and side rods are removed	20 MPH
When hauled in train with all rods on	30 MPH

Blocking of leading drivers of an engine, in order to redistribute weight, should not be attempted as this may cause derailment.

MAXIMUM SPEED PERMITTED WHEN HANDLING CERTAIN EQUIPMENT

	MPH
Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers, transported on their own wheels; and car-top ditchers when blocking and tie-down cables are removed:	
On tangent main tracks	35
except SPMW 4044	25
On tangent branch tracks	25
On all curves 5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	
Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this manner except in emergency):	
On tangent main tracks	20
On curves and on branch tracks	15
Trains handling locomotive cranes with boom in place, either end forward (to be handled in work trains when practicable):	
On tangent main tracks	25
On curves and on branch tracks	15
Trains handling steel pile-drivers may make maximum freight train speed.	
Trains handling relief outfit with steam derrick:	
On tangent main tracks	35
On tangent branch tracks except:	25
(Relief outfits 7014 and 7025 must not be operated on any branch, unless authorized by superintendent.)	
On all curves 5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	

Passenger trains handling steel wheel box cars in series 5810 to 5874, and foreign line steel wheel box cars equipped for movement in passenger trains, but not equipped with high speed trucks, must not exceed 60 MPH. Wooden equipment must not be handled in regular passenger trains. Extra passenger trains handling wooden coaches or chair cars must not exceed 40 MPH.

Maximum speed of deadhead equipment or passenger trains with standard caboose is 50 MPH.

Trains consisting of engine and caboose only restricted to freight train speed, except when caboose has steel wheels, may make speed permitted the engine when running light.

Trains consisting of engine, flanger and caboose may operate at maximum allowable speed of freight trains. In curve territory where maximum speed of passenger trains is 30 MPH flangers will be permitted to operate at same speed.

Where mail, papers, or ice are to be dispatched from passenger trains at points where train does not stop, slow down sufficiently to permit safe dispatch without hazard, and stop at such stations for this purpose if train is moving on adjoining track between passenger train and point of exchange.

Trains handling logs on flat or logging cars must not exceed 25 MPH on tangent track, and 20 MPH on curved track.

Motors must not exceed 10 MPH while backing through yards and over highway crossings.

Trains handling locomotive cranes with flexible or swivel truck trailing must not exceed 18 MPH.

RULE 7 (B). Herders must use green flag by day and green light by night in giving proceed signals for movement of trains and engines at Gerber, Dunsmuir and Dunsmuir Yard.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Keswick Branch trains to recall flagman between Redding and Keswick.

RULE 14 (e). As specified below, — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Keswick Branch trains to recall flagman between Keswick and Redding.

RULE 14 (k). Will not apply in CTC System between west switch Black Butte and Redding.

RULE 83 (A). At the following stations, only the trains indicated will register:

Dunsmuir Yard..... Dunsmuir...........	Trains originating or terminating.

RULE 92. First sentence will not apply to trains arriving Dunsmuir.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, except within C.T.C. limits, are established at the following points:

West MP		East MP
211.92	Gerber	216.08
222.04	Red Bluff......................................	224.63
256.10	Redding	258.70
317.91	Dunsmuir	326.60

Gerber. Westward freight trains and light engines must not pass east switch of yard track No. 1 unless proceed signal received from yardman

Dunsmuir Yard. Eastward trains and engines receiving diverging route signal to enter west end of Dunsmuir Yard must not pass signal unless flashing white light is displayed on the reverse side of absolute dwarf signal located just east of the derail between main track and lead track at west end of Dunsmuir Yard. Flashing light signal is authority for trains or engines to enter Dunsmuir Yard yard tracks.

When westward train is ready to leave yard track Dunsmuir Yard, whistle signal — o — should be sounded when opposite microphone on pole just west of Little Castle Creek crossing for dispatcher to line derail and switch.

Dunsmuir. Westward trains receiving diverging route signal at east switch must not pass absolute signal at east switch unless flashing white light is displayed. This flashing white light is mounted on mast of absolute signal which governs eastward movements on Track No. 1 located 300 feet west of east switch. Westward trains or engines on Tracks No. 1 or No. 2 must not pass fouling point of these tracks east of Shanty No. 3 just east of Butterfly Avenue crossing unless proceed signal received from yardman.

Eastward trains or engines on inside tracks must not pass Signal 3218 Butterfly Avenue crossing unless proceed signal received from herder at Shanty No. 3, and must not pass fouling point of No. 1 or No. 2 tracks west of Shanty No. 4 unless proceed signal received from herder.

Westward trains, except first-class and light engines, moving on main track must not pass east switch of the third crossover west of Butterfly Avenue crossing unless proceed signal received from herder.

Fouling point sign has been placed between west end of sand house lead and Pit Track No. 25 governing both tracks and between Pit Track No. 26 and outbound engine lead governing both tracks. Outbound engines must not pass these fouling point signs until derails have been lined and signal received from herder.

Switching of house track at Dunsmuir must be done by using second crossover west of house track, keeping the main track crossover switch open at all times during this switching operation.

When handling passenger equipment Dunsmuir or Dunsmuir Yard, single car must not be left on track not protected by derail.

RULE 102. Should a passenger train break in two or an emergency application of brakes occur while in motion on the grade between Delta and Dunsmuir, head brakeman will immediately go towards rear, close angle cock at opening if train has parted, set hand brakes, and turn up retainers on detached portion. After train is coupled air must be applied from engine before hand brakes and retainers are released.

If necessary to leave detached portion on main track, rear truck of detached portion ascending grade or lead truck of detached portion descending grade must be chained to rail in such manner as to derail car should they start.

RULE 104. The normal position of rigid switches at end of double track and junctions is as follows:

Redding......Keswick Br., for Silverthorn line.

RULE 105. Following tracks are designated for use as sidings:

Redding. Track on passenger station side next to main track for westward trains. Track on freight station side next to main track for eastward trains, extends from initial switch at west end to C.T.C. limit.

RULE 221. First-class trains will not obtain clearance at Dunsmuir Yard.

Eastward trains originating at Dunsmuir Yard and westward trains terminating at Dunsmuir Yard need not obtain clearance at Dunsmuir.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 2141 at Gerber may then proceed with caution not exceeding 12 MPH provided signal is received from yardman.

Trains or engines stopped by Signal 3205 or 3206 at Dunsmuir Yard; 3218, 3221 or 3222 at Dunsmuir, may proceed with caution, not exceeding 12 MPH.

RULE 510. The following block signals, equipped with triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signal	GERBER - DUNSMUIR	Westward Signal
	Spring switch east end siding Glade................	P-2249
P-2330	Spring switch west end siding, Hooker...........	
	Fire Protection bridge 259.7..........................	P-2597
	Slide detector fence at MP 273.7 west end tunnel No. 3 .... Slide detector fence at MP 274.1 east end tunnel No. 3	P-2749
	Fire Protection bridge 278.5..........................	P-2793
P-2796	Fire Protection bridge 280.2..........................	
	Fire Protection bridge 282.7..........................	P-2829
P-2838	Fire Protection bridge 283.8..........................	
P-2868	Fire Protection bridge 287.9.......................... Slide detector fence MP 287.6.........................	P-2883
P-2882	Fire Protection bridge 288.5..........................	
P-3024	Slide detector fence at MP 302.7.....................	

RULE 516. Overlap posts:

Eastward trains.

Red Bluff. 300 feet west of east switch. Eastward trains holding main track at Red Bluff will cause westward signal at west end of Glade siding to indicate "stop" when they pass onto the preliminary overlap extending 1300 feet west of Red Bluff station. This preliminary overlap is cut off after time interval and signal at Glade will, after remaining in stop position two and one-half minutes, change to "proceed" providing eastward train at Red Bluff remains west of overlap post.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows, and speed indicated must not be exceeded while trailing through the switches:

			Maximum Speed	
Location		Normal Position	Psgr.	Frt.
Glade	East end siding.......	Main track......	25	25
Hooker.....	West end siding......	Main track......	15	15

RULE 605. INTERLOCKING

Redding. Interlocking limits extend from end of C.T.C. to interlocking signal 545 feet west of train-order signal, Redding.

Westward trains approaching Redding will be governed by indication of absolute signal at east switch of eastward siding. Proceed indication for main track will authorize train to enter Redding interlocking limits.

Trains from Keswick Branch will stop at Signal No. 2589 and call operator at Redding for permission to move into interlocking limits.

Trains or engines must get permission from operator at Redding before leaving Sterling Lumber spur or the engine spur or corral lumber spur, or before moving eastward through crossover at overhead bridge.

Telephones at Signals 2586, 2587, and 2589 and at derail of engine spur.

Call-on dwarf light signal on eastward siding near crossover at west interlocking limits. When flashing white light displayed authorizes train to proceed on eastward siding to entrance of C.T.C. System.

Call-on dwarf light signal near east end westward siding. When flashing white light displayed authorizes eastward train on westward siding to enter main track and proceed to entrance of C.T.C. System.

These flashing white lights do not dispense with the use or the observance of automatic, interlocking or other signals, or Rule 513.

When automatic signals within Redding interlocking limits on main track display stop indication, operator's permission must be obtained before train proceeds as prescribed by Rules 509, 509 (F), or 509 (J).

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illuminated Letter	On Signal	Approaching	Authorizes and requires movement as follows
M	2564	Redding	Proceed to fouling point east end westward siding.
S	2564	Redding	Enter eastward siding.
M	2585	Redding	Proceed to fouling point west end eastward siding.
S	2585	Redding	Enter westward siding.

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Centralized Traffic Control System extends from east switch Redding to east switch Black Butte.

The absolute signal just east of the east switch of eastward siding at Redding governs westward trains. When this signal indicates "proceed", trains may move from the limit of the Centralized Traffic Control to the interlocking signal in advance, under authority of Rule 605

At the west end of Pit River bridge, there are two 2-indication dwarf light type special signals; one signal governs movement of eastward trains on the main track, and one signal governs movement of eastward trains on the siding.

At the east end of the Pit River bridge, there are four 2-indication dwarf light type special signals; two signals govern the movement of eastward trains, one for the main track and one for the siding, and two signals govern movement of westward trains, one for the main track and one for the siding.

These signals display "white" for proceed, and "red" for stop, and are identified as "dragging equipment signals".

Trains finding these signals indicating "stop", must stop and make inspection of their train for dragging equipment and obtain dispatcher's permission before proceeding.

Three-unit absolute signal at the east end of siding at Lakehead governing westward trains is equipped with a "call-on" signal.

Top Unit	Governs movement on main track.
Center Unit	Governs movement to siding.
Lower Unit	Governs movement to house track.
Call-on Signal (Flashing Yellow Light)	Proceed to couple to train on main track or siding.

Helper engine that is to move and couple to a train on main track or siding after receiving proper absolute signal indication, must stop on short track circuit, just east of 3-unit absolute signal, and wait for "call-on" signal to operate. When call-on signal displays a flashing yellow light, it confers authority to pass the 3-unit absolute signal indicating "stop", and move to the train occupying the main track or siding after such train has stopped and hand signal is received from member of train crew.

In Centralized Traffic Control territory, running switches are prohibited over dual control switches. Sanders, blow-off cocks must not be used, injectors must not be opened or closed, or booster started while engine standing on or passing over such switches.

Telephone for communicating with train dispatcher located at:
Signal 2741 east end tunnel No. 3.
Signal 2744 west of tunnel No. 5.
Signal 2760 between tunnels Nos. 6 and 7.
At absolute signals at MP 286.9 (one mile east of Lakehead).
Signal 2882 between tunnels Nos. 11 and 12.

RULE 762. Flag protection to rear of train as prescribed by Rule 99 is required by westward trains standing or delayed on main track between Signal 3205 and next absolute signal at west end Dunsmuir Yard, and by eastward trains standing or delayed on main track with rear of train between Signal 3206 Dunsmuir Yard and absolute signal located on signal bridge between Dunsmuir Yard and Dunsmuir.

RULE 763. Revised to read as follows:

"Train indicators, signals and markers must be displayed through centralized traffic control limits. Rule S-17, Fig. 7 of Rule 19, and Rule 19 (A) will not apply on controlled sidings."

Trains entering C.T.C. limits at Redding will display same indication and signals to the end of the subdivision. Trains leaving Dunsmuir or Dunsmuir Yard will display indicators and signals in accordance with address shown on clearance. Clearance issued to a section of a schedule must read "no signals" or "green signals" following the address. Trains originating at other intermediate points in C.T.C. limits will display indicators as an extra unless otherwise instructed by train dispatcher.

Second paragraph of Rule 96 will not apply at Redding when there is no change in the number of sections of a schedule moving from C.T.C. territory into train-order territory.

GENERAL REGULATIONS

RULE 824. Instructions for setting hand brakes:

Dunsmuir and Dunsmuir Yard:

Passenger trains	Two brakes on east end. Three brakes on west end.
Freight trains	Ten brakes on west end. Ten brakes in center of train. Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employe releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Dunsmuir or Dunsmuir Yard until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

When it is necessary to double over incoming freight trains at Dunsmuir Yard, trainmen will secure that portion of train not doubled over, and yardmen will secure that portion of train doubled over, with the required number of hand brakes.

RULE 829. Trains using siding at Glade will afford a two-hundred-foot clearance east of road crossing near east switch when possible.

RULE 849. Trainmen on passenger trains will open train heat valve on rear of train at station one-mile board Gerber and Dunsmuir, and enginemen will shut off train heat one-half mile from station

SPECIAL INSTRUCTIONS—REDDING SUBDIVISION

RULE 862. Trainmen arriving Gerber on first-class trains will remain on duty and protect their train until outgoing brakemen have inspected train and assumed their proper positions, at which time incoming brakemen will be relieved.

If train is to be delayed beyond schedule time, outgoing conductor will have his rear brakeman relieve flagman of incoming crew as soon as inspection has been completed.

RULE 869. Freight brakemen must be on top of train descending grades between Dunsmuir and Delta.

On freight trains between Dunsmuir and Redding, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 827. TRAIN INSPECTION

Trains handling logs must stop and crew must inspect load and chains before passing through tunnels and all crossings except 2nd, 4th, 5th, 14th and 15th over Sacramento River.

AIR BRAKE RULES

RULE 17. Retainers will be used on freight and mixed trains on descending grades as follows:

Dunsmuir Yard-Delta.......One valve for each 250 Ms in train.

Speed of freight trains must be reduced at points where trainmen are required to handle retainers.

FREIGHT TRAINS

RULE 22. Trainmen must not couple air hose on outgoing trains at Gerber until train is made up and engine and caboose on train.

RULE 25 (b). Rear end test must be made between following points:

Redding and Dunsmuir..In accordance with Air Brake Rule 25.

PASSENGER TRAINS

RULE 37. Trainmen must not couple steam and air hose on outgoing trains at Gerber until train is made up.

MISCELLANEOUS

4. When necessary to use two helpers on eastward freight trains between Redding and Dunsmuir, place one helper next ahead of caboose, the other at least 15 cars ahead of the rear helper.

10. Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
AC-4-5-6-7-8-10-11-12	Dirigo—Industrial tracks.
Engines heavier than 210,000 lbs. on drivers..	Red Bluff—Pioneer Fruit spur.
"	Redding — Hoefers spur; Sterling Lbr. spur.
"	Lamoine—Little Slate Creek bridge.
"	Gibson—Spur.

14. Enginemen will operate tie sprinklers on engine tanks when so equipped on westward freight trains and light engines between Dunsmuir and Redding.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description	
258.2	Redding	Highway bridge..................	Overhead
301.8	Lamoine	Sacramento River bridge No. 6....	Overhead
305.3	Gibson	Sacramento River bridge No. 8....	Overhead
305.4	Gibson	Tunnel No. 13....................	Overhead
306.7	Fisher.........	Sacramento River bridge No. 9....	Overhead
307.0	Fisher.........	Tunnel No. 14....................	Overhead
308.6	Fisher.........	Sacramento River bridge No. 10...	Overhead
308.9	Gibson	Sacramento River bridge No. 11...	Overhead
310.3	Sims	Sacramento River bridge No. 12...	Overhead

SPEED RESTRICTIONS

AC-1-2-3 class engines between Delta and Dunsmuir must not exceed 20 MPH where slow boards prescribe 25 MPH for freight trains.

Trains handling logs must not exceed 5 MPH through tunnels and over all crossings Sacramento River except 2nd, 4th, 5th, 14th, and 15th.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, crossovers, turnouts, and slip-switches, except:	15
Engines moving west over spur switch east end Lamoine siding	10
Through any siding, crossover, turnout or slip-switch with engine backing................	10

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
		PASSENGER														
		P-8 (if CCB*) P-7-10-12 GS Mt	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T-26-32-37-40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB*) AC-1-2-3-6 (if not CCB*) GN Ry., F-5	C-15-17-32 Mk-10-11 MM-3	FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-5-6-7-8-9 F (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 AC AM-2 MM-3 GN Ry., F-5	E A T P C TW Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
2, 3	Between Gerber and Dunsmuir, except	70	65	60	55	50	45	40	35	40	40	35	30	30	30	25
	*Over street crossings Red Bluff MP 222.91 to MP 223.83	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Red Bluff MP 223.6-Hooker MP 233.6	60	60	60	55	50	45	40	35	40	40	35	30	30	30	25
	*Over street crossings Redding MP 258.2 to MP 258.7	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Redding MP 258.2-Pitbridge MP 272.69	60	60	60	55	50	45	40	35	35	35	35	30	30	30	25
	Pitbridge MP 272.69-MP 273.35	45	45	45	45	45	45	40	35	35	35	35	30	30	30	25
	MP 273.35-MP 288.66	55	55	55	55	50	45	40	35	35	35	35	30	30	30	25
	MP 288.66-Signal 3206	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	Signal 3206-east switch Dunsmuir	20	20	20	20	20	20	20	20	15	15	15	15	15	15	15
8	Between Redding and Coram	....	....	....	....	....	....	....	....	15	15	15	15	15	15	15

*Regulated by city ordinance.

REDDING SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Gerber to Delta	Delta to Dunsmuir	Dunsmuir to Gerber
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....	....
DES-100 to 107	1300 to 1395	....	....	....
E-23	1500 and 1502	1300	1050	2050
M-4	1617 to 1713	1750	1450	2750
M-6, 8	1721 to 1803, 1823 to 1825	2100	1700	3250
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	2200	1800	3450
M-11	1832 to 1835	2300	1900	3550
T-1	2242 to 2271	1500	1200	2350
T-8, 9	2161, 2174 and 2178	1050	860	1650
T-23	2301 to 2310	2210	1800	3400
T-26	2283 to 2299	1900	1550	3000
T-28, 31	2311 to 2362	2300	1850	3750
T-32, 40	2363 to 2384	2450	2000	3800
T-36	2103	1650	1350	2500
T-37	2105 and 2106	2200	1800	3400
T-57, 58	2385 and 2386	2000	1600	3050
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	1950	1550	3050
P-1	2400, 2403 to 2407 and 2415	2050	1650	3200
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	2150	1700	3350
P-6	2453, 2454 and 2458	2450	1950	3800
P-7	2476 and 2477	2600	2100	4050
P-8, 10	2461 to 2474, 2478 to 2483	2650	2150	4150
P-8, 10	2475, 2484 to 2491	2800	2250	4400
P-11	3100 to 3109	2100	1700	3300
P-12	3120 to 3129	2700	2150	4300
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	2700	2150	4200
C-15, 32	2500, 2505 to 2507	1700	1400	2650
C-17	2510 and 2511	2150	1750	3250
C-18	3400 to 3409	2500	2000	3800
C-19	3410 to 3426	2550	2100	3950
TW-1	2900 to 2913	2050	1650	3150
TW-2, 3	2932 to 2952	1600	1300	2500
TW-4, 6	2926 to 2931 and 2957	1550	1250	2400
TW-8	2914 to 2923	2400	1850	3500
A-3	3029	1500	1200	2400
A-3	3025, 3036, 3052 and 3057	1550	1250	2500
A-6	3000 to 3003	1850	1500	2950
Mk-2, 4	3201 to 3240	3000	2400	4900
Mk-5, 6	3241 to 3277	3200	2600	5300
Mk-7, 8, 9	3300 to 3324	3750	3050	5750
Mk-10	3295	3000	2350	4450
Mk-11	3297 and 3298	2800	2300	4250
F-1	3600 to 3652	3900	3150	5950
F-3	3653 to 3667	4750	3650	6900
F-4, 5	3668 to 3769	4750	3650	6950
AM-2	3900 to 3911	4400	3500	6600
MM-3	3930 and 3931	5200	4250	7550
AC-1, 2, 3	4000 to 4048	5300	4300	8350
AC-4, 5	4100 to 4125	7000	5600	10900
AC-6 to 12	3800 to 3811, 4126 to 4294	7500	6000	11600
Mt-1, 3, 4, 5	4300 to 4376	3500	2850	6200
Mt-2	4385 to 4390	3900	3200	6050
GS-1, 2	4400 to 4415	3700	3000	6450
GS-3, 4, 5, 6	4416 to 4469	3900	3100	6600
SP-1, 2, 3	5000 to 5048	5300	4300	8100
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6	6
	45 Ms to 55 Ms	3	3	3
	More than 55 Ms	0	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

RULE 7 (B). Herders must use green flag by day and green light by night in giving proceed signals for movement of trains and engines at Dunsmuir, Dunsmuir Yard, Klamath Falls and Klamath Falls Yard.

RULE 14. Light engines arriving Dunsmuir from east, desiring to enter roundhouse lead, will sound whistle signal, o — o o.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Siskiyou line trains to recall flagman between junction switch Black Butte and Weed.

RULE 14 (e). As specified below, — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Siskiyou line trains to recall flagman between junction switch Black Butte and Weed.

RULE 14 (k). Will not apply in C.T.C. System between west switch Black Butte and Redding.

RULE 83. Eastward trains must obtain train-order check of overdue superior trains at Black Butte, but may identify opposing trains between west and east switches Black Butte, and may identify eastward superior trains between train-order office and east switch Black Butte.

RULE 83 (A). At the following stations, only the trains indicated will register:

Dunsmuir Yard Dunsmuir	Trains originating or terminating.

Klamath Falls Yard—Westward trains originating at Klamath Falls; eastward third-class and extra trains terminating at Klamath Falls.

Klamath Falls—All trains except westward extra freight trains originating.

RULE 83 (B). At open train-order offices, trains may register by ticket as follows:

Grass Lake—All trains.

Klamath Falls Yard—Westward first-class trains and extra passenger trains.

Klamath Falls—Westward GNRy trains.

Operator Klamath Falls will repeat registration of eastward first-class trains to operator Klamath Falls Yard for entry in register.

Registration must be repeated for verification.

RULE S-90. Eastward freight trains with more cars than will clear between the east portal, tunnel 13 and east switch, with train orders to meet westward train at Siskiyou, will not move train through tunnel until it has been ascertained that westward train is into clear on siding.

RULE 92. First sentence will not apply to trains arriving Dunsmuir.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, except within C.T.C. limits, are established at the following points:

West MP		East MP
317.91	Dunsmuir	326.60
	Black Butte	346.49
	" " Siskiyou line	346.50
392.78	Mt. Hebron	394.68
425.67	Klamath Falls	432.66
552.04	" " Merrill line	
345.64	Weed	349.57
375.04	Montague	376.34
392.26	Hornbrook	394.01
426.92	Ashland	430.79

Dunsmuir. Westward trains receiving diverging route signal at east switch must not pass absolute signal at east switch unless flashing white light is displayed. This flashing white light is mounted on mast of absolute signal which governs eastward movements on track No. 1 located 300 feet west of east switch. Westward trains or engines on tracks No. 1 or No. 2 must not pass fouling point of these tracks east of Shanty No. 3 just east of Butterfly Avenue crossing unless proceed signal received from yardman.

Fouling point sign has been placed between west end of sand house lead and pit track No. 25 governing both tracks and between pit track No. 26 and outbound engine lead governing both tracks. Outbound engines must not pass these fouling point signs until derails have been lined and signal received from herder.

Switching of house track at Dunsmuir must be done by using second crossover west of house track, keeping the main track crossover switch open at all times during this switching operation.

When handling passenger equipment Dunsmuir or Dunsmuir Yard, single car must not be left on track not protected by derail.

Klamath Falls. Eastward trains except first-class must stop before passing Signal 4286 unless they receive proceed signal from herder. Herder must not line switch for eastward trains to enter yard until train has been identified.

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

RULE 102. Should a passenger train break in two or an emergency application of brakes occur while in motion on the grade between Dunsmuir and Grass Lake, or between Hornbrook and Ashland, head brakeman will immediately go towards rear, close angle cock at opening if train has parted, set hand brakes, and turn up retainers on detached portion. After train is coupled air must be applied from engine before hand brakes and retainers are released.

If necessary to leave detached portion on main track, rear truck of detached portion ascending grade or lead truck of detached portion descending grade must be chained to rail in such manner as to derail car should they start.

RULE 103 (A). Crossing leading to roundhouse, opposite ice house at Ashland must be kept open for fire protection except during switching operations.

RULE 104. The normal position of rigid switches at end of double track and junctions is as follows:

Mount Shasta...McCRRR main track, for interchange track.
Black Butte ....Siskiyou line, for controlled siding.
Leaf ....L-B Lbr. Co. main track, for interchange track.
Klamath Falls..GNRy main track, for SP main track.
Klamath Falls..Merrill line, for Black Butte line.
Klamath Falls..OC&ERy main track, for yard track.
Montague.......YWRy main track, for house track.

Trains using McCloud River Railroad Company's house track at Mount Shasta must leave derail lined and locked in derailing position.

RULE 105. Following tracks are designated for use as sidings:

Weed. Siding located east of station building on opposite side of main track.

Black Butte. Siskiyou siding extends from connection to controlled siding at west switch Black Butte to connection to controlled siding opposite east water column. West switch is dual controlled, east switch hand operated. Westward trains must not enter Siskiyou siding without permission from dispatcher.

Grass Lake. Track on station side of main track for westward trains. Westward trains taking siding, stop east of west switch house track. Track on opposite side of main track for eastward trains.

Bray. House track must be left clear for meeting or passing of trains.

Mt. Hebron. Track on station side of main track for westward trains. Track on opposite side of main track for eastward trains.

Siskiyou. When a westward train is holding main track to meet an eastward train and switch is open for train to enter siding, conductor of train holding main track will arrange to protect the eastward train against light engines or other trains occupying siding, and will give the eastward train sufficient room to avoid stopping engines in tunnel. Westward trains receiving an order to meet an opposing train on track known as turntable lead at Siskiyou (this track is on south side of main track used by helper engines moving to and from turntable) must not pass signal 4127 until it is known that opposing train has passed signal 4112 at west end of tunnel 13. Eastward trains or engines will leave turntable lead at east switch located 200 feet west of signal 4124.

RULE 221. First-class trains will not obtain clearance at Dunsmuir Yard.

Eastward trains originating at Dunsmuir Yard and westward trains terminating at Dunsmuir Yard need not obtain clearance at Dunsmuir.

First-class trains will not obtain clearance at Klamath Falls Yard.

Westward trains, except first-class, will obtain clearance at Klamath Falls Yard and need not obtain clearance at Klamath Falls.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by signal 3205 or 3206 at Dunsmuir yard; 3218, 3221 or 3222 at Dunsmuir; 4288, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

Diverging route arm in proceed position on signal 4112 west of Siskiyou, authorizes train to proceed and enter siding.

RULE 509 (J). When necessary to send flagman through tunnel 13, at Siskiyou, train must wait until flagman calls on telephone from opposite end of tunnel.

RULE 510. The following block signals, equipped with triangular number plate displaying the letter "P", have included in their control limits some special protective device.

Eastward Signal	DUNSMUIR-KLAMATH FALLS	Westward Signal
P-3290	Slide detector fence east of tunnel No. 16, MP 329.5	P-3301
P-3682	Spring switch west end westward siding Grass Lake	
	Spring switch east end eastward siding Grass Lake	P-3695

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs to GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate "proceed" after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate "proceed", Rules 509 (F) and 99 apply.

RULE 516. Overlap posts:

Eastward Trains:
Leaf —Fouling point west switch.
Texum —Near middle of siding.

Westward Trains:
Ady —Opposite clearance point east end of siding.
Somerset—Near middle of siding.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows, and speed indicated must not be exceeded while trailing through the switches.

Location		Normal Position	Max. Speed Psgr.	Max. Speed Frt.
Grass Lake	West end westward siding	Main track	25	25
Grass Lake	East end eastward siding	Main track	15	15

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Centralized Traffic Control System extends from east switch Redding to east switch Black Butte.

In Centralized Traffic Control territory, running switches are prohibited over dual control switches. Sanders, blow-off cocks must not be used, injectors must not be opened or closed, or booster started while engine standing on or passing over such switches.

Eastward absolute signals just west of station building Black Butte display indications as follows:

Main track signal: top unit for main track; center unit for crossover to Siskiyou line; lower unit for crossover to controlled siding.

Controlled siding signal: top unit for crossover to main track; center unit for Siskiyou line; lower unit to continue movement on controlled siding. Flashing white light on this signal to left of mast indicates signal is cleared for movement out of Siskiyou siding; and to right of mast indicates signal is cleared for movement from controlled siding.

RULE 762. Flag protection to the rear as prescribed by Rule 99 is required by eastward trains standing or delayed on main track with rear of train between Signal 3316 and east switch at Mott; and by westward trains standing or delayed on main track with rear of train between Signal 3317 and west switch Mott.

Flag protection to rear of train as prescribed by Rule 99 is required by westward trains standing or delayed on main track between Signal 3205 and next absolute signal at west end Dunsmuir Yard, and by eastward trains standing or delayed on main track with rear of train between Signal 3206 Dunsmuir Yard and absolute signal located on signal bridge between Dunsmuir Yard and Dunsmuir.

RULE 763. Revised to read as follows:

"Train indicators, signals and markers must be displayed through centralized traffic control limits. Rule S-17, Fig. 7 of Rule 19, and Rule 19 (A) will not apply on controlled sidings."

Trains entering C.T.C. limits at Black Butte will display same indication and signals to the end of the subdivision. Trains leaving Dunsmuir or Dunsmuir Yard will display indicators and signals in accordance with address shown on clearance. Clearance issued to a section of a schedule must read "no signals" or "green signals" following the address. Trains originating at other intermediate points in C.T.C. limits will display indicators as an extra unless otherwise instructed by train dispatcher.

Second paragraph of Rule 96 will not apply at Black Butte when there is no change in the number of sections of a schedule moving from C.T.C. territory into train-order territory.

GENERAL REGULATIONS

RULE 824. Instructions for setting Hand Brakes:

Dunsmuir and Dunsmuir Yard: Passenger Trains	Two brakes on east end. Three brakes on west end.
Freight Trains	Ten brakes on west end. Ten brakes in center of train. Five brakes on east end.
Ashland: Passenger Trains	Two brakes on east end.
Freight Trains	Five brakes on east end. Five brakes on west end.
Klamath Falls: Passenger Trains	Two brakes on west end. Two brakes on east end.
Freight Trains	Five brakes on west end. Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employe releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Dunsmuir, Dunsmuir Yard, Klamath Falls or Ashland until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

When it is necessary to double over incoming freight trains at Dunsmuir Yard, trainmen will secure that portion of train not doubled over, and yardmen will secure that portion of train doubled over, with the required number of hand brakes.

Eastward trains exceeding siding clearance at Siskiyou will cut in helpers a sufficient distance ahead of caboose at Hornbrook to avoid stopping helpers in Tunnel 13.

On arrival at Siskiyou, on westward trains, sufficient hand brakes must be set to hold rear of train before cutting off helper engine, and on rear portion of train when backing down to cut out helper.

Westward freight trains cutting all helpers at Siskiyou will take siding and use braking power track to run around rear portion of train. Cars must not be left standing on main track with engine detached.

RULE 849. Trainmen on passenger trains will open train heat valve on rear of train at station one-mile board, Dunsmuir and Klamath Falls, and enginemen will shut off train heat one-half mile from station, except during extreme cold weather at Klamath Falls, train heat valve will be opened on rear of eastward trains at Sixth Street viaduct and engineman will shut off steam just prior to stopping at passenger station.

RULE 862. After first-class trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes and go off duty. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

RULE 869. Freight brakemen must be on top of train descending grades between Edgewood and Black Butte, Snowdon and Ashland, Grass Lake and Dunsmuir Yard.

On freight trains between Black Butte and Edgewood, Snowdon and Ashland, Mt. Hebron and Dunsmuir Yard, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 827. TRAIN INSPECTION

Freight trains, and mixed trains with cast iron wheels, and light engines not equipped with tire coolers except Mallets, on descending grades will stop 10 minutes between switches at the following stations, to permit wheels to cool. Trainmen will make careful inspection of all cars and enginemen inspect engines:

Steinman	
Gregory	
Hilt	Exception—five minutes.
Weed or Edgewood	
Azalea	Exception—five minutes.
Andesite	Freight trains that have stopped at Cougar not less than 5 mins., may go to Bolam for inspection without stopping at Andesite, in which event, must make 10 min. stop at Bolam.

AC class engines running light on descending grade stop sufficient length of time to inspect engine.

Light engines descending grade between Hornbrook and Ashland, stop sufficient time at designated freight train inspection stations for inspection of engine and to permit heat of tires to equalize.

When conditions favorable, westward freight trains may run Klamath Falls to Grass Lake without stopping for inspection, if, in the judgment of conductor and engineer no stops are necessary.

Trains handling logs must stop and crew must inspect load and chains before entering Klamath Falls Yard, passing through tunnels and over Dry Canyon viaduct between Hotlum and Bolam, Klamath River bridge west of Hornbrook.

AIR BRAKE RULES

RULE 2. When Diesel switch engine is used on yard tracks at east end of Klamath Falls, handling cuts of forty empties or twenty-five loads or more, air brakes must be cut in on not less than four cars

RULE 17. Retainers will be used on freight and mixed trains on descending grades as follows:

Azalea-Dunsmuir Yard	One valve for each 100 Ms in train.
Grass Lake-Azalea	One valve for each 150 Ms in train.
Black Butte-Edgewood	One valve for each 100 Ms in train.
Snowdon-Hornbrook	One valve for each 150 Ms in train.
Siskiyou-Ashland	One valve for each 90 Ms in train.
Siskiyou-Hornbrook	One valve for each 90 Ms in train.

Westward freight trains must turn up not less than ten retainers on head end of train before entering yard tracks at Klamath Falls.

Speed of freight trains must be reduced at points where trainmen are required to handle retainers.

If tonnage exceeds amount of Ms specified for each retainer, trains may be handled between Azalea and Dunsmuir Yard, Black Butte and Edgewood, up to 120 Ms; and between Ashland and Hornbrook up to 100 Ms per operative retainer.

Retainers must be turned down momentarily ascending grade between MP 403.6 and Hilt. Retainers must be turned down if stop is made between MP 388.4 and Hornbrook. The maximum retaining pressure must be used from Siskiyou to Ashland and Siskiyou to Hornbrook on loaded cars, except refrigerators equipped with the 10-20 and 15-30 pound retainers.

Freight trains of not more than 60 cars and not more than 65 Ms per operative brake may be handled Snowdon to Hornbrook or Grass Lake to Azalea with no retainers provided engineer can properly control speed of train and charge brake pipe to standard pressure between applications. If necessary to use retainers to control speed of train engineer will instruct train crew number of retainers required.

The tonnage of any freight train between Hornbrook and Ashland must not exceed 100 Ms per operative brake when handled on descending grade by AM, F or SP class engine. When other class engine is used, 90 Ms per operative brake will govern. Westward trains must not be moved out of Ashland in excess of this tonnage per operative brake. The tonnage of any freight train descending grade between Mount Shasta and Dunsmuir, Black Butte and Edgewood, must not exceed 120 Ms per operative brake.

Passenger trains with more than four head end cars will turn up retainers on head end cars at Mount Shasta, and turn up all other accessible retainers Azalea to east switch Dunsmuir.

All retainers must be turned up on passenger trains Siskiyou to Ashland, and accessible retainers may be turned down after passing yard limit board west of Ashland.

All accessible retainers must be turned up on passenger trains Black Butte to Edgewood.

All retainers must be turned up on passenger trains Siskiyou to MP 403.6. Retainers on head end cars must be left turned up between MP 403.6 and MP 400, but should be turned down momentarily if stop is made at Hilt. All retainers must be turned up on passenger trains MP 400 to Hornbrook.

FREIGHT TRAINS

RULE 25(a). Rear end test must be made immediately prior to leaving Siskiyou on all trains; Grass Lake on westward trains; Hornbrook on eastward trains; Black Butte on Siskiyou line trains.

RULE 25(b). Rear end test must be made between following points: Dunsmuir Yard and Jerome; Black Butte and Edgewood; Snowdon and Ashland; in accordance with Air Brake Rule 25.

PASSENGER TRAINS

RULE 38. Rear end test must be made immediately prior to leaving Siskiyou on all trains (including mixed trains).

RULE 39. Running test on passenger trains must be made as follows: Eastward trains at Snowdon; Siskiyou line trains at Black Butte; westward trains at Grass Lake.

MISCELLANEOUS

1. Leading and helper engines must not cut off from head and rear portion of train at the same time at Steinman when taking water. When leading engine is coupled to train, after taking water, engineman will place automatic brake valve on lap, then sound one long whistle signal. Helper engineman will then make fifteen pound reduction of brake pipe pressure, leading engineman noting fall of brake pipe pressure will release brakes and after brake pipe has been charged, helper engine may then be cut off. Trainmen will not cut off helper engine until advised by helper engineman that brake pipe has been recharged.

4. Helper services:

Helper engine must not be placed on head end of freight trains, except on trains consisting entirely of logs between Leaf and Grass Lake.

Helper engines on Siskiyou line on eastward freight trains between Gregory and Siskiyou will be cut in single, separated by not less than 12 cars.

10. Engines listed are not permitted to operate on tracks shown below.

Class of Engine	Restricted tracks
Engines heavier than 210,000 lbs. on drivers..	Weed—Long Bell Lbr. Co., docks 1 and 2 in lumber shed; shed spur; block spur; factory 2; factory 3; and No. 6 lumber yard.
"	Industrial tracks between Bray and Klamath Falls, except that C, AC-1-2-3 class engines may operate on all spurs at Dorris, and on lumber spur back of stock corral at Macdoel.
Mt, GS, AC-4-5-6-7-8-10-11-12....................	Pioneer—Spur. (F class may operate at not to exceed 6 MPH).
AC-4-5-6-7-8-10-11..........	Penoyar—Spurs. Use reach.
All..............................	Mount Shasta—McCRRR main track from clearance with interchange east end of yard to point opposite station building.

When necessary to occupy McCRRR Company's tracks at Mount Shasta, including the west leg of wye, it must be under protection of flag.

Tracks, except main track at Leaf, are used by engines and motor cars of the Long Bell Lumber Company, and all movements over these tracks including both legs of wye, and to Long Bell siding must be made with caution.

14. Enginemen will operate tie sprinklers on engine tanks when so equipped on westward freight trains and light engines between Azalea and Dunsmuir.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP		Location	
325.0	Dunsmuir .	Sacramento River bridge No.16..	Overhead and side
329.4	Cantara . . .	Tunnel No. 16..................	Overhead and side
407.8	Dorris . . .	Tunnel No. 17..................	Overhead and side
410.0	Dorris	Tunnel No. 18..................	Overhead and side
		Siskiyou line	
390.9	Ager	Klamath River bridge..........	Overhead and side
411.3	Gregory . .	Tunnel No. 13..................	Overhead and side
414.6	Siskiyou . .	Tunnel No. 14..................	Overhead and side
415.2	Siskiyou . .	Tunnel No. 15..................	Overhead and side
419.9	Steinman .	Tunnel No. 16..................	Overhead and side
419.9	Steinman .	Water tank........................	Side

Planing mill tracks 1 and 2 of Long Bell Lumber Company at Weed will not be switched except between hours of 10 A.M. and 4 P.M. Yardmen will not ride on top of cars when using these tracks.

SPEED RESTRICTIONS

AC-1-2-3 class engines between Dunsmuir and Mount Shasta, and between Black Butte and Grass Lake must not exceed 20 MPH where slow boards prescribe 25 MPH for freight trains.

Trains handling logs must not exceed 5 MPH through tunnels, and over Dry Canyon viaduct between Hotlum and Bolam; over Klamath River bridge at MP 390.0 (Siskiyou line); and over 16th crossing Sacramento River.

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Trains consisting of engine and caboose only, may operate at speed of 25 MPH between Delta and Mount Shasta.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, crossovers, turnouts, and slip-switches, except:............	15
Hornbrook, engines using wye, enter on west leg and leave on east leg........................	8
Through any siding, crossover, turnout or slip-switch with engine backing........................	10

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
		PASSENGER														
		P-8 (if CCB*) P-7-10-12 GS Mt	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T-26-32-37-40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB*) AC-1-2-3-6 (if not CCB*) GN Ry., F-5	C-15-17-32 Mk-10-11 MM-3	FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-5-6-7-8-9 F (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 AC AM-2 MM-3 GN Ry., F-5	E A T P C TW Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
4, 5	Between Dunsmuir and Klamath Falls, except	60	60	60	55	50	45	40	35	40	40	35	30	30	30	25
	Signal 3206-east switch Dunsmuir	20	20	20	20	20	20	20	20	15	15	15	15	15	15	15
	E. switch Dunsmuir-Mount Shasta MP 342.7	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	Mount Shasta-Deetz MP 342.7	50	50	50	50	50	45	40	35	35	35	35	30	30	25	25
	Deetz-Black Butte	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	Black Butte-MP 355.5	35	35	35	35	35	35	35	35	25	25	25	25	25	20	20
	MP 355.5-MP 367.10	40	40	40	40	40	40	40	35	35	35	35	30	30	30	25
	MP 367.10-MP 373.76	50	50	50	50	50	45	40	35	35	35	35	30	30	30	25
	MP 382.16-MP 391.1	50	50	50	50	50	45	40	35	35	35	35	30	30	30	25
	MP 391.1-MP 407.35	60	60	60	55	50	45	40	35	35	35	35	30	30	30	25
	MP 407.35-MP 427.8	50	50	50	50	50	45	40	35	35	35	35	30	30	30	25
	MP 427.8-MP 429.9	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
8	Between Black Butte and Ashland, except	50	50	50	50	50	45	40	35	30	30	30	30	30	30	25
	Black Butte-MP 359.05	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	MP 359.05-MP 360.83	40	40	40	40	40	40	40	40	20	20	20	20	20	15	15
	MP 372.24-MP 375.14	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	MP 381.48-MP 394.32	25	25	25	25	25	25	25	25	20	20	20	20	20	15	15
	MP 394.32-MP 426.41	20	20	20	20	20	20	20	20	15	20	20	20	20	15	15
	MP 426.41-Ashland	30	30	30	30	30	30	30	30	20	20	20	20	20	15	15

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Dunsmuir and Edgewood Dunsmuir to Black Butte	Black Butte to Grass Lake	Mt. Hebron to Dunsmuir	Grass Lake to Klamath Falls Klamath Falls to Mt. Hebron	Snowdon to Edgewood Edgewood to Hornbrook	Hornbrook to Ashland Ashland to Hilt	Hilt to Hornbrook Hornbrook to Snowdon
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....	....	....	....	....	....
DES-100 to 107	1300 to 1395	....	....	....	....	....	....	....
E-23	1500 and 1502	540	930	1400	2950	1300	300	710
M-4	1617 to 1713	770	1250	1900	3850	1760	460	1000
M-6, 8	1721 to 1803, 1823 to 1825	930	1500	2250	4550	2070	570	1200
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	1000	1600	2400	4800	2150	620	1300
M-11	1832 to 1835	1050	1650	2500	5000	2250	650	1350
T-1	2242 to 2271	660	1100	1650	3300	1450	390	860
T-8, 9	2161, 2174 and 2178	440	760	1150	2400	1100	250	590
T-23	2301 to 2310	970	1550	2350	4750	2150	590	1250
T-26	2283 to 2299	820	1350	2050	4200	1850	490	1070
T-28, 31	2311 to 2362	1000	1650	2300	5250	2450	700	1400
T-32, 40	2363 to 2384	1100	1800	2650	5350	2520	680	1420
T-36	2103	730	1150	1750	3550	1620	450	960
T-37	2105 and 2106	980	1600	2350	4800	2200	600	1260
T-57, 58	2385 and 2386	880	1400	2150	4300	1950	540	1150
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	810	1350	2100	4300	1950	470	1070
P-1	2400, 2403 to 2407 and 2415	850	1450	2200	4500	2050	490	1130
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	900	1500	2300	4700	2150	520	1200
P-6	2453, 2454 and 2458	1050	1750	2600	5350	2450	620	1360
P-7	2476 and 2477	1050	1850	2800	5650	2600	620	1500
P-8, 10	2461 to 2474, 2478 to 2483	1100	1900	2900	5900	2650	640	1500
P-8, 10	2475, 2484 to 2491	1200	2000	3050	6200	2800	700	1590
P-11	3100 to 3109	900	1500	2250	4650	2100	530	1180
P-12	3120 to 3129	1100	1900	2700	6000	2800	700	1600
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	1200	1950	2700	5850	2700	800	1600
C-15, 32	2500, 2505 to 2507	770	1250	1850	3700	1750	480	980
C-17	2510 and 2511	980	1550	2300	4550	2100	620	1250
C-18	3400 to 3409	1100	1800	2650	5300	2450	710	1450
C-19	3410 to 3426	1150	1850	2750	5550	2550	730	1500
TW-1	2900 to 2913	920	1450	2200	4400	2000	570	1180
TW-2, 3	2932 to 2952	720	1150	1750	3550	1700	440	950
TW-4, 6	2926 to 2931 and 2957	670	1100	1650	3350	1600	400	880
TW-8	2914 to 2923	1050	1650	2500	5000	2250	640	1350
A-3	3029	600	1050	1650	3400	1500	320	840
A-3	3025, 3036, 3052 and 3057	630	1100	1700	3550	1550	340	870
A-6	3000 to 3003	770	1300	2000	4150	1800	430	1030
Mk-2, 4	3201 to 3240	1300	2100	3000	6500	3100	930	1900
Mk-5, 6	3241 to 3277	1400	2300	3200	7000	3450	970	2000
Mk-7, 8, 9	3300 to 3324	1700	2700	4050	8050	3700	1000	2200
Mk-10	3295	1300	2100	3000	6200	2900	830	1680
Mk-11	3297 and 3298	1250	2000	3000	5950	2750	810	1660
F-1	3600 to 3652	1750	2800	4150	8350	4000	1100	2300
F-3	3653 to 3667	2000	3250	4850	9650	4600	1250	2600
F-4, 5	3668 to 3769	2000	3200	4500	9650	4800	1250	2700
AM-2	3900 to 3911	1900	3100	4300	9200	4600	....	2800
MM-3	3930 and 3931	2350	3750	5600	11150	5300	....	3050
AC-1, 2, 3	4000 to 4048	2500	3800	5400	11000	5500	....	3250
AC-4, 5	4100 to 4125	3100	5000	6900	14000	7200	....	4300
AC-6 to 12	3800 to 3811, 4126 to 4294	3300	5300	7400	15000	7600	....	4500
Mt-1, 3, 4, 5	4300 to 4376	1550	2500	3500	7750	3700	1000	2250
Mt-2	4385 to 4390	1700	2800	4200	8500	3950	1050	2300
GS-1, 2	4400 to 4415	1600	2600	3700	8400	3950	....	2150
GS-3, 4, 5, 6	4416 to 4469	1650	2700	3850	8500	4150	....	2250
SP-1, 2, 3	5000 to 5048	2400	3850	5700	11350	5500	1500	3150
Allowance for Empty and Underloaded Cars	Less than 45 Ms	3	3	3	6	3	3	3
	45 Ms to 55 Ms	3	3	3	3	3	3	3
	More than 55 Ms	0	0	0	0	0	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTE TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

RULE 7 (B). Herders must use green flag by day and green light by night in giving proceed signals for movement of trains and engines at Klamath Falls and Klamath Falls Yard.

RULE 83 (A). At the following stations, only the trains indicated will register:

Chemult ....Trains originating or terminating.

RULE 83 (B). At open train-order offices, trains may register by ticket as follows:

Klamath Falls......Westward GNRy trains.
Crescent Lake......Nos. 11, 12, 13, 14, 15, 17 and 18.

Operator Klamath Falls will repeat registration of eastward first-class trains to operator Klamath Falls Yard for entry in register.

Registration must be repeated for verification.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, are established at the following points:

West MP		East MP
425.67	Klamath Falls..................................	432.66
552.04	" " (Merrill line)......................	
455.16	Chiloquin	458.67
469.84	Kirk	471.13
527.51	Crescent Lake..................................	530.16

Klamath Falls. Westward trains except first-class approaching Klamath Falls must not pass distant signal 4305 unless flashing white light displayed on mast of this signal which will be authority to move to east switch, where trains to enter yard tracks must stop and not proceed into yard until signal received from herder.

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

RULE 104. The normal position of rigid switches at end of double track and junctions is as follows:

Klamath Falls......GNRy main track, for SP main track.
Gilchrist Jct.........KNRy main track, for interchange track.
Chemult...........GNRy main track, for siding.

RULE 105. Following tracks are designated for use as sidings:

Kirk. Track on station side of main track for eastward trains. Track on opposite side of main track for westward trains.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signals 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

RULE 510. The following block signals, equipped with triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signal	Klamath Falls-Crescent Lake	Westward Signal
P-4404 P-4422 P-4434	Slide detector fence between MP 442 and MP 444..	P-4453 P-4435 P-4421

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs to GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate "proceed" after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate "proceed", Rules 509 (F) and 99 apply.

Normal indication of Signal 5031 governing movement from GNRy connection and Signal 5025 governing movement from interchange track at Chemult is "stop". Proceed indication will be displayed after switches and derails are lined for movement if block is clear. Should these signals fail to indicate "proceed" after switches are lined, train may proceed in accordance with Rule 509 (F). All movements to main track must be protected as prescribed by Rule 99.

RULE 516. Overlap posts:

Westward trains:
Pine Ridge......Near middle of siding.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illuminated Letter	On Signal	Approaching	Authorizes and requires movement as follows
M............	4550.....	Chiloquin...	Proceed to fouling point east end of Chiloquin siding.
S	4550.....	Chiloquin...	Enter siding.
M............	4585.....	Pine Ridge..	Proceed to fouling point west end of Chiloquin siding.
S	4585.....	Pine Ridge..	Enter Chiloquin siding.
M............	5022.....	Chemult.....	Proceed to fouling point east end of siding.
S	5022.....	Chemult.....	Enter siding.
M............	5043.....	Chemult.....	Proceed to fouling point west end of siding.
S	5043.....	Chemult.....	Enter siding.

Indicators approaching Chemult do not apply to GNRy trains.

GENERAL REGULATIONS

RULE 824. Instructions for setting hand brakes:

Klamath Falls: Passenger trains....	Two brakes on west end. Two brakes on east end.
Freight trains.......	Five brakes on west end. Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employe releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Klamath Falls until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

RULE 849. Trainmen on passenger trains will open train heat valve on rear of train at station one-mile board Klamath Falls, and enginemen will shut off train heat one-half mile from station, except during extreme cold weather at Klamath Falls, train heat valve will be opened on rear of westward trains at subway just east of Main Street and engineman will shut off steam just prior to stopping at passenger station.

RULE 862. After first-class trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes and go off duty. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

RULE 869. Freight brakemen must be on top of train descending grades.

On freight trains between Kirk and Chiloquin, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 827. TRAIN INSPECTION

When conditions favorable, eastward freight trains may run Klamath Falls to Lenz, and Kirk to Crescent Lake, westward freight trains Crescent Lake to Kirk and Lenz to Klamath Falls without stopping for inspection, if, in the judgment of conductor and engineer no stops are necessary.

Trains handling logs must stop and crew must inspect load and chains before entering Klamath Falls Yard, passing through tunnels and over Sprague River bridge west of Chiloquin.

AIR BRAKE RULES

RULE 2. When Diesel switch engine is used on yard tracks at east end of Klamath Falls, handling cuts of forty empties or twenty-five loads or more, air brakes must be cut in on not less than four cars.

RULE 17. Westward freight trains must turn up not less than ten retainers on head end of train before entering yard tracks at Klamath Falls.

Speed of freight trains must be reduced at points where trainmen are required to handle retainers.

Sufficient retainers must be turned up, in the judgment of engineer, to properly control trains handling logs descending grade between Kirk and Chiloquin.

RULE 25 (b). Rear end test must be made between following points:

Chiloquin and Kirk; Chemult and Crescent Lake, in accordance with Air Brake Rule 25.

MISCELLANEOUS

10. Look out for falling rocks between Algoma and Modoc Point.

Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines heavier than 210,000 lbs. on drivers..	On industrial tracks between Klamath Falls and Kirk, except that engines not heavier than 275,000 pounds on drivers may operate on Chiloquin Lumber Co. track extending off stem of wye at Chiloquin.
All	Modoc Point—Lamm Lumber Co. spur.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	
456.0	Lobert.......Sprague River bridge......	Overhead and side

SPEED RESTRICTIONS

Trains handling logs must not exceed 5 MPH through tunnels and over Sprague River bridge, west of Chiloquin.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, crossovers, turnouts, and slip-switches, except:...........	15
Passenger trains on house track at Algoma.........	8
Chiloquin, stem of wye to log pond................	6
Through any siding, crossover, turnout or slip-switch with engine backing.............................	10

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
		PASSENGER														
		P-8 (if CCB*) P-7-10-12 GS Mt	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T -26 -32 -37 -40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB*) AC-1-2-3-6 (if not CCB*) GN Ry., F-5	C-15-17-32 Mk-10-11 MM-3	FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-5-6-7-8-9 F (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 AC AM-2 MM-3 GN Ry., F-5	E A T P C TW	Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
6, 7	Between Klamath Falls and Crescent Lake, except	60	60	60	55	50	45	40	35	40	40	35	30	30	30	25
	MP 434.28-MP 441.9 (Dredger fill)	60	60	60	55	50	45	40	35	35	35	35	30	30	30	25
	*Over street crossings Chiloquin MP 456.5 to MP 456.7	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	MP 502.95-Crescent Lake	50	50	50	50	50	45	40	35	35	35	35	30	30	30	25

*Regulated by city ordinance.

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender

NOMINAL CLASS	ENGINE NUMBERS	Crescent Lake to Klamath Falls	Klamath Falls to Crescent Lake
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....
DES-100 to 107	1300 to 1395	....	....
E-23	1500 and 1502	2950	1650
M-4	1617 to 1713	3850	2200
M-6, 8	1721 to 1803, 1823 to 1825	4550	2600
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	4800	2800
M-11	1832 to 1835	5000	2900
T-1	2242 to 2271	3300	1900
T-8, 9	2161, 2174 and 2178	2400	1350
T-23	2301 to 2310	4750	2750
T-26	2283 to 2299	4200	2400
T-28, 31	2311 to 2362	5250	3050
T-32, 40	2363 to 2384	5350	3100
T-36	2103	3550	2050
T-37	2105 and 2106	4800	2750
T-57, 58	2385 and 2386	4300	2500
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	4300	2450
P-1	2400, 2403 to 2407 and 2415	4500	2550
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	4700	2700
P-6	2453, 2454 and 2458	5350	3050
P-7	2476 and 2477	5650	3250
P-8, 10	2461 to 2474, 2478 to 2483	5900	3350
P-8, 10	2475, 2484 to 2491	6200	3550
P-11	3100 to 3109	4650	2650
P-12	3120 to 3129	6000	3400
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	5850	3400
C-15, 32	2500, 2505 to 2507	3700	2150
C-17	2510 and 2511	4550	2650
C-18	3400 to 3409	5300	3100
C-19	3410 to 3426	5550	3200
TW-1	2900 to 2913	4400	2550
TW-2, 3	2932 to 2952	3550	2050
TW-4, 6	2926 to 2931 and 2957	3350	1900
TW-8	2914 to 2923	5000	2900
A-3	3029	3400	1900
A-3	3025, 3036, 3052 and 3057	3550	2000
A-6	3000 to 3003	4150	2350
Mk-2, 4	3201 to 3240	6500	3650
Mk-5, 6	3241 to 3277	7000	3750
Mk-7, 8, 9	3300 to 3324	8050	4650
Mk-10	3295	6200	3600
Mk-11	3297 and 3298	5950	3450
F-1	3600 to 3652	8350	4850
F-3	3653 to 3667	9650	5600
F-4, 5	3668 to 3769	9650	5650
AM-2	3900 to 3911	9200	5150
MM-3	3930 and 3931	11150	6450
AC-1, 2, 3	4000 to 4048	11000	6800
AC-4, 5	4100 to 4125	14000	8000
AC-6 to 12	3800 to 3811, 4126 to 4294	15000	8600
Mt-1, 3, 4, 5	4300 to 4376	7750	4500
Mt-2	4385 to 4390	8500	4900
GS-1, 2	4400 to 4415	8400	4800
GS-3, 4, 5, 6	4416 to 4469	8500	4900
SP-1, 2, 3	5000 to 5048	11350	6600
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6
	45 Ms to 55 Ms	3	3
	More than 55 Ms	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

RULE 7 (B). Herders must use green flag by day and green light by night in giving proceed signals for movement of trains and engines at Klamath Falls and Klamath Falls Yard.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, are established at the following points:

West MP		East MP
425.67	Klamath Falls	432.66
552.04	“ “ (Merrill line)	
454.93	Alturas	461.23
	“ (Lakeview Branch)	460.19
510.63	Lakeview	513.05

Klamath Falls. Eastward trains except first-class must stop before passing Signal 4286 unless they receive proceed signal from herder. Herder must not line switch for eastward trains to enter yard until train has been identified.

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

Trains and engines approaching Klamath Falls yard tracks from Merrill Subdivision must not pass Signal 4276 unless signal in proceed position and flashing white light displayed on mast of signal which will be authority to move to east end of Track 17 and must receive signal from herder before moving to receiving track.

RULE 104. The normal position of rigid switches at end of double track and junctions is as follows:

Klamath Falls......GNRy main track, for SP main track.
Klamath Falls......Merrill line, for Black Butte line.
Klamath Falls......OC&ERy main track, for yard track.
Alturas............Lakeview Br., for Merrill line.

RULE 221. Light will not be displayed in train-order signal at Willow Ranch except when train-order operator is on duty.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 4288, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs to GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate “proceed” after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate “proceed”, Rules 509 (F) and 99 apply.

AUTOMATIC INTERLOCKING

Stronghold. Crossing GNRy one-half mile east of Stronghold.

When trains are stopped by signals governing the use of automatic interlockings, flagman must be sent to crossing to operate clock-work time-release. Release must not be operated when trains are between home signals or seen approaching on intersecting line.

After release has been operated, a red indicator light should be displayed over release and home signal should indicate “proceed” or red indicator on home signal mast be displayed. Trains may then proceed.

If red indicator lights are not displayed, trains may proceed over crossing as provided by Rule 663.

Instructions for operating clock-work time-release are posted on door of box.

GENERAL REGULATIONS

RULE 824. INSTRUCTIONS FOR SETTING HAND BRAKES

Klamath Falls: Passenger trains... {Two brakes on west end.
{Two brakes on east end.
Freight trains..... {Five brakes on west end.
{Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employe releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Klamath Falls until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

RULE 849. Trainmen on passenger trains will open train heat valve on rear of train at station one-mile board Klamath Falls, and enginemen will shut off train heat one-half mile from station, except during extreme cold weather at Klamath Falls, train heat valve will be opened on rear of eastward trains at Sixth Street viaduct and engineman will shut off steam just prior to stopping at passenger station.

RULE 862. After passenger trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes and go off duty. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

RULE 869. Freight brakemen must be on top of train descending grades between Ambrose and Canby.

On freight trains between Ambrose and Canby, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 827. TRAIN INSPECTION

Freight trains, and mixed trains with cast iron wheels, and light engines not equipped with tire coolers except Mallets, on descending grades will stop 10 minutes between switches at the following stations, to permit wheels to cool. Trainmen will make careful inspection of all cars and enginemen inspect engines:

Canby........
Hackamore...When using retainers.

AC class engines running light on descending grade stop sufficient length of time to inspect engine.

Trains handling logs must stop and crew must inspect load and chains before entering Klamath Falls Yard.

RULE 17. Retainers will be used on freight and mixed trains on descending grades as follows:

Ambrose-Canby. . . . .One valve for each 100 Ms in train.

Speed of freight trains must be reduced at points where trainmen are required to handle retainers.

If tonnage exceeds amount of Ms specified for each retainer, trains may be handled between Ambrose and Canby, up to 120 Ms per operative retainer.

Sufficient retainers must be turned up, in the judgment of engineer, to properly control trains handling logs descending grade between Ambrose and Perez.

All accessible retainers must be turned up on passenger trains Ambrose to Canby.

RULE 25 (a). Rear end test must be made immediately prior to leaving Ambrose on westward trains.

RULE 25(b). Rear end test must be made between following points:

Perez and Canby, in accordance with Air Brake Rule 25.

MISCELLANEOUS

4. Helper service:

Helper engine must not be placed on head end of freight trains, except on trains consisting entirely of logs, between Canby and Ambrose.

10. Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines heavier than 210,000 lbs. on drivers. .	Lakeview Branch — Between MP 457.50 and Lakeview.
All	Alturas—Farmers Exchange spur beyond Fourth Street.

Load limit (car and contents):

Lakeview Branch. . . . . .169,000 pounds.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, crossovers, turnouts, and slip-switches, except.	15
Canby, Lumber Company's spur.	8
Through any siding, crossover, turnout or slip-switch with engine backing.	10

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
		PASSENGER														
		P-8 (if CCB*) P-7-10--12 GS Mt	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T-26-32-37-40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB*) AC-1-2-3-6 (if not CCB*) GN Ry., F-5	C-15-17-32 Mk-10-11 MM-3	FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-5-6-7-8-9 F (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 AC AM-2 MM-3 GN Ry., F-5	E A T P C TW Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
9	Between Alturas and Klamath Falls except	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25
	Canby-Ambrose	20	20	20	20	20	20	20	20	20	20	20	20	20	15	15
9	Between Alturas and Lakeview									20	20	20	20	20	15	15

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Klamath Falls and Perez Canby and Alturas	Perez to Canby	Canby to Perez	Alturas and Lakeview
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....	....	....
DES-100 to 107	1300 to 1395	....	....	....	....
E-23	1500 and 1502	2000	1300	540	1100
M-4	1617 to 1713	2650	1800	770	1500
M-6, 8	1721 to 1803, 1823 to 1825	3100	2100	930	1750
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	3300	2250	1000	1900
M-11	1832 to 1835	3450	2350	1050	1950
T-1	2242 to 2271	2250	1550	660	1250
T-8, 9	2161, 2174 and 2178	1600	1100	440	900
T-23	2301 to 2310	3250	2250	970	1850
T-26	2283 to 2299	2850	1950	820	1600
T-28, 31	2311 to 2362	3550	2450	1050	2050
T-32, 40	2363 to 2384	3650	2500	1100	2100
T-36	2103	2400	1650	730	1350
T-37	2105 and 2106	3250	2250	980	1850
T-57, 58	2385 and 2386	2950	2000	880	1650
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460}	2900	1950	810	1600
P-1	2400, 2403 to 2407 and 2415	3050	2050	850	1700
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	3200	2150	900	1800
P-6	2453, 2454 and 2458	3650	2450	1050	2050
P-7	2476 and 2477	3850	2650	1050	2200
P-8, 10	2461 to 2474, 2478 to 2483	4000	2700	1100	2200
P-8, 10	2475, 2484 to 2491	4200	2850	1200	2350
P-11	3100 to 3109	3150	2150	900	1750
P-12	3120 to 3129	4200	2850	1150	2350
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	3950	2750	1200	2250
C-15, 32	2500, 2505 to 2507	2550	1750	770	1450
C-17	2510 and 2511	3150	2150	980	1800
C-18	3400 to 3409	3650	2500	1100	2100
C-19	3410 to 3426	3800	2600	1150	2200
TW-1	2900 to 2913	3000	2050	920	1700
TW-2, 3	2932 to 2952	2400	1650	720	1350
TW-4, 6	2926 to 2931 and 2957	2300	1550	670	1300
TW-8	2914 to 2923	3400	2300	1000	1900
A-3	3029	2300	1550	600	1250
A-3	3025, 3036, 3052 and 3057	2400	1600	630	1300
A-6	3000 to 3003	2800	1900	770	1550
Mk-2, 4	3201 to 3240	4550	3100	1350	2500
Mk-5, 6	3241 to 3277	5050	3450	1400	2850
Mk-7, 8, 9	3300 to 3324	5550	3800	1700	3200
Mk-10	3295	4200	2950	1250	2450
Mk-11	3297 and 3298	4100	2850	1250	2350
F-1	3600 to 3652	5700	3950	1750	3300
F-3	3653 to 3667	6600	4550	2000	3800
F-4, 5	3668 to 3769	6650	4850	2000	4000
AM-2	3900 to 3911	6600	4550	2000	3800
MM-3	3930 and 3931	7650	5300	2350	4400
AC-1, 2, 3	4000 to 4048	8000	5750	2500	4600
AC-4, 5	4100 to 4125	10450	7200	3200	6050
AC-6 to 12	3800 to 3811, 4126 to 4294	11000	7600	3350	6350
Mt-1, 3, 4, 5	4300 to 4376	5350	3600	1550	3000
Mt-2	4385 to 4390	5800	4000	1700	3300
GS-1, 2	4400 to 4415	5700	3850	1550	3200
GS-3, 4, 5, 6	4416 to 4469	6050	4050	1650	3350
SP-1, 2, 3	5000 to 5048	7800	5350	2400	4500
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6	3	6
	45 Ms to 55 Ms	3	3	3	3
	More than 55 Ms	0	0	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTE TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

MILEAGE

ain Line

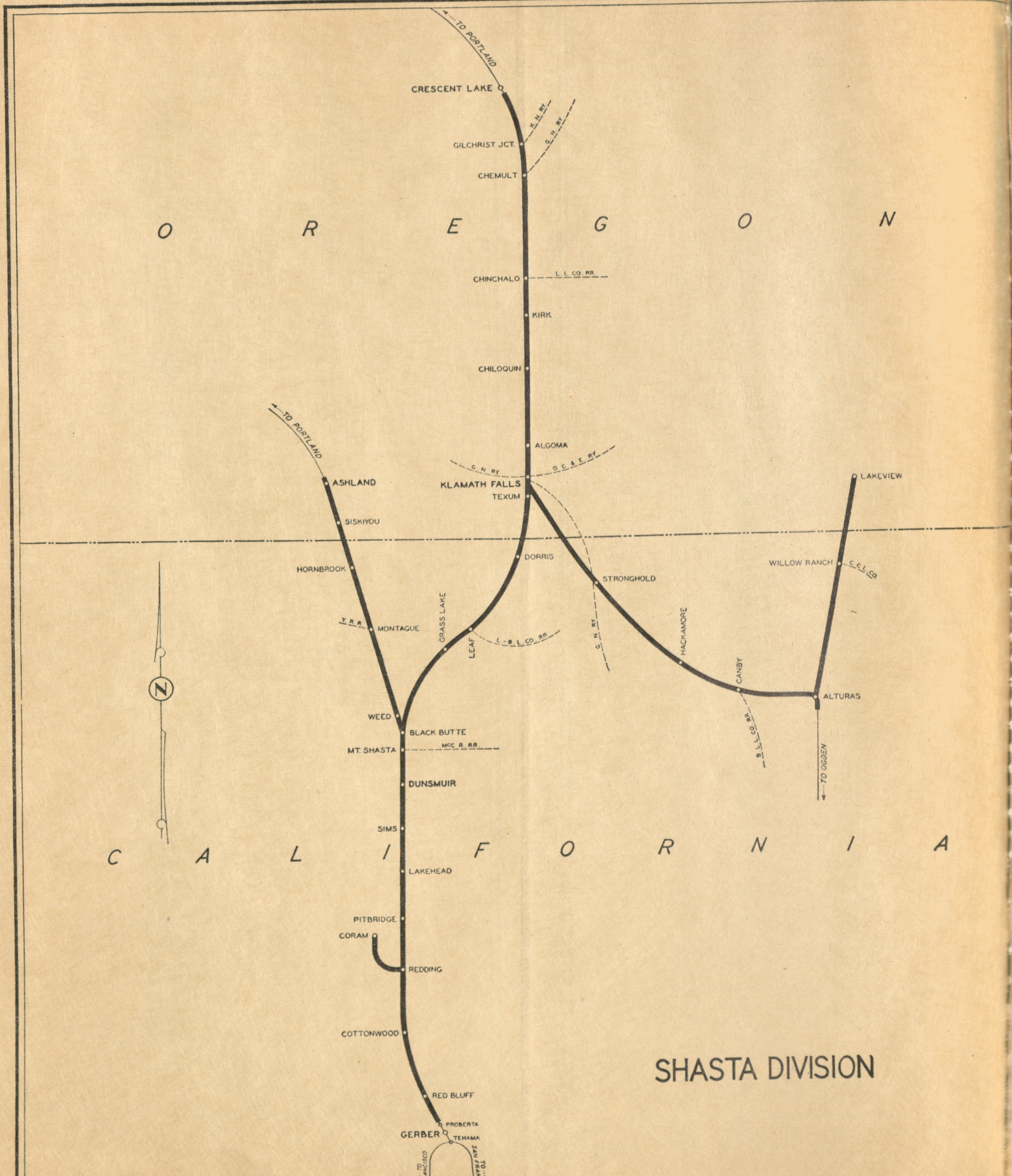
oberta to California-Oregon State Line	C. P. Ry		181.001	
alifornia-Oregon State Line to Ashland	S. P. Co		27.597	
ack Butte to Crescent Lake	C. P. Ry		181.773	
ola to Klamath Falls	N. C. O. Ry	2.309		
	C. P. Ry	95.345	97.654	
Total Main Line				488.025

ranches

eswick	U. S. B. R.	Redding to Coram	13.490	
akeview	N. C. O. Ry	Alturas to Lakeview	56.163	
Total				69.653
Total Shasta Division				557.678

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36″	100
37″	97.3
38″	94.7
39″	92.3
40″	90
41″	87.8
42″	85.7
43″	83.7
44″	81.8
45″	80
46″	78.3
47″	76.6
48″	75
49″	73.5
50″	72
51″	70.6
52″	69.2
53″	67.9
54″	66.6
55″	65.4
56″	64.2
57″	63.1
58″	62
59″	61
1′00″	60
1′01″	59
1′02″	58
1′03″	57.1
1′04″	56.2
1′05″	55.3
1′06″	54.5
1′07″	53.7
1′08″	52.9
1′09″	52.1
1′10″	51.4
1′11″	50.7
1′12″	50
1′13″	49.3
1′14″	48.6
1′15″	48
1′16″	47.3
1′17″	46.7
1′18″	46
1′19″	45.5
1′20″	45
1′25″	42.3
1′30″	40
1′35″	37.9
1′40″	36
1′45″	34.3
1′50″	32.7
1′55″	31.3
2′00″	30
2′15″	26.6
2′30″	24
2′45″	21.8
3′00″	20
3′30″	17.1
4′00″	15
5′00″	12
6′00″	10
7′00″	8.6
7′30″	8
8′00″	7.5
10′00″	6


TO PORTLAND
CRESCENT LAKE
K. N. RY.
G. N. RY.
GILCHRIST JCT.
CHEMULT
O R E G O N
CHINCHALO
L. L. CO. RR.
KIRK
CHILOQUIN
TO PORTLAND
ALGOMA
G. N. RY.
O. C. & E. RY.
KLAMATH FALLS
TEXUM
LAKEVIEW
ASHLAND
SISKIYOU
DORRIS
HORNBROOK
STRONGHOLD
WILLOW RANCH
C. C. L. CO.
Y. R. R.
MONTAGUE
GRASS LAKE
LEAF
L.-B. L. CO. RR.
G. N. RY.
HACKAMORE
CANBY
ALTURAS
N
WEED
BLACK BUTTE
MT. SHASTA
McC. R. RR.
B. L. L. CO. RR.
TO OGDEN
DUNSMUIR
SIMS
C A L I F O R N I A
LAKEHEAD
PITBRIDGE
CORAM
REDDING
COTTONWOOD
RED BLUFF
PROBERTA
GERBER
TEHAMA
TO SAN FRANCISCO
TO SAN FRANCISCO

SHASTA DIVISION